

# THE ILLUSTRATED LONDON NEWS

REGISTERED AS A NEWSPAPER FOR TRANSMISSION IN THE UNITED KINGDOM, AND TO CANADA AND NEWFOUNDLAND BY MAGAZINE POST.

No. 3829.—VOL. CXLI.

SATURDAY, SEPTEMBER 7, 1912.

With Supplement: "Comet" Centenary at Glasgow. **SIXPENCE.**

*The Copyright of all the Editorial Matter, both Engravings and Letterpress, is Strictly Reserved in Great Britain, the Colonies, Europe, and the United States of America.*



WITH HIS TRADE SIGN ON HIS "COAT" AND WITH HARLEQUIN-LIKE PANTALOONS: A WORKMAN ENGAGED ON THE BUILDING OF THE BAMBOO FENCE ROUND THE AOYAMA PARADE GROUND, WHICH IS TO BE THE SCENE OF THE FUNERAL OF THE EMPEROR OF JAPAN.

It is interesting to note, in connection with the fact that the sign of the workman's trade is very easily visible on his "coat," that such signs are used even on the Japanese umbrella. "The common kind, such as is used by servants going out on an

errand, and by the poorer classes," says Mr. Jukichi Inouye, in his "Home life in Tokio," "is of plain oiled paper marked with the name, usually the first syllable, of its owner, and his trade sign if he is an artisan, or tradesman, and sometimes his address as well."

PHOTOGRAPH BY ILLUSTRATIONS BUREAU.



## HARWICH ROUTE TO THE CONTINENT

ACCELERATED SERVICES TO & FROM NORTH GERMANY.

NEW SERVICE TO DRESDEN WITH THROUGH CARRIAGES.

Via **HOOK OF HOLLAND** (British Royal Mail Route) Daily by Turbine Steamers. Liverpool Street Station dep. 8.30 p.m. Corridor Train with 1st and 2nd class Dining and Breakfast Cars; no Supplementary Charge for Seats. Through Carriages and Restaurant Cars from and to the Hook of Holland alongside the steamers.

LONDON TO PEKIN in 14 DAYS, TOKIO in 16 DAYS.

Via **ANTWERP** for BRUSSELS and the Belgian Ardennes, every Week-day by large Twin-Screw Steamers. Liverpool Street Station, dep. 8.40 p.m. Corridor Train with 1st and 2nd class Dining and Breakfast Cars; no Supplementary Charge for Seats.

**WIRELESS TELEGRAPH** and **SUBMARINE SIGNALLING** on the Great Eastern Railway Steamers.

Via **ESBJERG** for Denmark, Norway and Sweden, by the Danish Royal Mail Steamers of the Forenede Line of Copenhagen, Mondays, Wednesdays, Fridays, and Saturdays. Liverpool Street Station, dep. 7.15 p.m. Dining and Restaurant Cars.

Via **HAMBURG** by the General Steam Navigation Company's steamers "Perseus" and "Hercules" fitted with Submarine Signalling, every Wednesday and Saturday. Liverpool Street Station, dep. 8.40 p.m. Corridor Trains with 1st and 2nd class Dining and Breakfast Cars. Single, 1st class, 41s.; 2nd class, 30s. Return, 1st class, 66s.; 2nd class, 45s.

Via **GOTHENBURG** for Sweden, by the Swedish Royal Mail Steamers (fitted with Wireless Telegraphy), of the Thule Line of Gothenburg every Saturday, May-September.

Corridor Ventilated Train with 1st and 2nd class Dining and Breakfast Cars, every Week-day, from and to York. Through Corridor Carriages from and to Liverpool, Warrington, Sheffield, Bradford (Exchanges), Leeds, Birmingham and Rugby.

The Trains to Parkston Quay, Harwich, run alongside the steamers, and hand baggage is taken on board free of charge.

Particulars of the Continental Traffic Manager, Great Eastern Railway, Liverpool Street Station, London, E.C.

## CANADA FOR HOLIDAYS AND SPORT.

### ALLAN ROYAL MAIL LINE

Popular Pioneer Service—famed for comfort, for exceptional cuisine, service, and for everything that makes an ocean voyage satisfactory and pleasant.

R.M.S. VICTORIAN & VIRGINIAN (triple-screw turbines).

Fishing, Shooting, Camping, Canoeing. Tours for three weeks and upwards planned.

ALLAN LINE, 14, Cockspur Street, S.W.; 19, James St., Liverpool, &c.

### VIA NEWHAVEN & DIEPPE.

Holiday Excursions to DIEPPE, ROUEN, and PARIS.

Week-ends at

**DIEPPE**

on the Lovely Bracing Coast of Upper Normandy, 4½ Hours only from London. Combined Week-end Tickets for

**BRIGHTON AND DIEPPE.**

Details of Continental Manager, Brighton Railway, Victoria, S.W.

## HOLIDAYS IN CANADA

HUNTING, FISHING,  
CAMPING, CANOEING

CANADIAN NORTHERN LINES TRAVERSE THE  
FINEST SPORTING GROUNDS IN CANADA

TRAVEL FROM BRISTOL

BY  
**ROYAL LINE**  
FASTEST STEAMERS.

For full particulars, Sailing Dates, Fares, &c., apply Head Offices—Bond Court, Walbrook, London, E.C. Ticket Offices—Baltic House, 25, Leadenhall Street, E.C. 3, Clarion, Cross, S.W.; 65, Haymarket, S.W.; London. 55, Baldwin Street, Bristol; Chapel Street, Liverpool; 141, Corporation Street, Birmingham; 125, Hope Street, Glasgow. 141, Rue de la Paix, Paris.

## WINTER SPORTS IN SWITZERLAND.

In consequence of the increasing demand for accommodation at the PRINCIPAL WINTER SPORTS CENTRES, THOS. COOK & SON are now allotting rooms for the forthcoming Season at:

ADELHODEN	DIABLEREG	LEUKERBAD
ANDERMATT	ENGELBERG	PONTRESINA
CELERINA	GRINDELWALD	ST. CERGUES
CHAMPERY	KLOSTERS	ST. MORITZ
DAVOS	LENK	SAMADEN

PLANS OF HOTELS AND ILLUSTRATED BOOKLET FREE FROM THOS. COOK & SON, LUDGATE CIRCUS, LONDON, AND BRANCHES.

## HIS MAJESTY'S THEATRE.

Proprietor, Sir Herbert Beerliohn Tree.

EVERY EVENING, at 8.

**DRAKE**, a play in three acts, by Louis N. Parker.

MATINEE EVERY WEDNESDAY AND SATURDAY.

## GARRICK.

FIND THE WOMAN.

A play in four acts, by Charles Klein.

Re-appearance of

ARTHUR BOURCHIER'S Production.

EVERY EVENING at 8.30. MATINEE EVERY WED. & SAT. at 2.30.

## PALLADIUM.

ARGYLE STREET, W.

CHARLES GULLIVER, Managing Director.

ALWAYS THE BEST ENTERTAINMENT IN LONDON.

Two Performances Daily, 6.30 and 8.30. Matinee, Monday, Wednesday and Saturday, 2.30. Admission from 6d. to 5s.; Private Boxes, 10s. 6d., 15s., and 21s.

ARTHUR BOURCHIER'S Seven Blind Men, Eugene Straton, Venetia Trel, Fred Karno, Fred Emney & Sydney Fairbrother, Ray & Zack, Sammie Shields, Mennese Trio, &c.

**ANTIQUITIES FOR SALE.**—A private family in Vienna (Austria) wishes to sell a collection of valuable antiquities, comprising paintings, old glass, cut glass of the 18th century, rare books and engravings, &c. For further particulars apply to Box 39, c/o Illustrated London News, 195, Strand.

## DEATH.

The death is announced, on August 30th, at Pembury Hall, Kent, of Mrs. Henry White (Douchy), widow of the late Henry White, Esq., J.P., &c., of 30, Queen's Gate, London, and youngest surviving child of the late Rev. Henry Augustus Holden, of Addison Road and Weedon, Northants. She was the sister of Mr. Luther Holden, sometime President of the Royal College of Surgeons, and of Canon Henry Holden, of Durham, and cousin of the well-known classical scholar, Dr. Hubert Holden.

## NOTE TO CONTRIBUTORS.

It is particularly requested that all SKETCHES and PHOTOGRAPHS sent to THE ILLUSTRATED LONDON NEWS, especially those from abroad, be marked on the back with the name and address of the sender, as well as with the title of the subject. All Sketches and Photographs used will be paid for. The Editor cannot assume responsibility for MSS., for Photographs, or for Sketches submitted.

## THE PLAYHOUSES.

"DRAKE." AT HIS MAJESTY'S.

(See Illustration.)

A PICTURESQUE, breezy, and stirring piece of drama such as its subject demanded has been constructed by Mr. Louis Napoleon Parker from the gallant career of Sir Francis Drake, and he must be a poor Englishman who does not, as he watches its series of tableaux, and listens to the brave rhetoric that accompanies them, feel himself instinctively responding to its romantic and patriotic appeal. Of course, this "Drake" is not so much a play as a pageant, in which the great sea-captain and his Queen move as central figures. Though Sir Francis had his charming love-affair with Bess Sydenham, and there is splendid dramatic material in the story of Thomas Doughty's conspiracy, and the stern execution with which his comrade visited his crime, the life of the Elizabethan hero cannot lend itself to the scheme of a close-knit play, because it is so full of episodes and adventures. The alternatives a dramatist finds himself confined to in such a case are selecting and magnifying a particular incident, or else summarising—as Mr. Parker has done—the whole career in a succession of typical scenes, and trying to illustrate by the way the spirit of the man and his age. Even if a conspectus is attempted much must be omitted, and when the object of such spectacular treatment is, as it is at His Majesty's, to show in the example of one great man an England grown suddenly self-conscious and self-reliant, obviously to dwell on his hour of eclipse and failure would spoil the general effect. So it is a young and gloriously successful Drake we see—the Drake who crossed the Isthmus of Darien and sailed round the world and helped to beat the Armada, and was the darling of his country and his Sovereign. There is just enough sequence in the details selected, with the background of a nation seemingly always ready to make holiday and join in welcomes to homecoming wanderers or the procession-making Queen, for the playgoer to get a certain impression of unity, and Mr. Parker has the happy knack of always avoiding the melodramatic touch in his dialogue, and keeping both his heroics and his comedy passages untainted by anything cheap. The Doughty trial is admirably managed, even to its quaint finale of criminal and judge drinking the loving-cup; the battle pictures reveal artistic imagination; even the bowls scene in connection with the Armada is made free from clap-trap; while the thanksgiving tableau in front of Old St. Paul's is a triumph at once of the author's invention and of brilliant stage-management. The acting in such a piece must necessarily be almost as spectacular as the play. But there is plenty of character both in Mr. Lynn Harding's Drake and Miss Phyllis Neilson-Terry's Queen Elizabeth. Mr. Harding was just the actor for his part. His Drake has the bluff manner of the sailor, and yet the suavity of the instinctive courtier and the ardour of the idealist. Miss Terry looks every inch a Queen. A host of minor roles are splendidly filled; Mr. A. E. George's study of a sturdy seaman perhaps calling for special mention. But the success of "Drake" is one of ensemble; everyone concerned did something to indicate that spirit of courage and patriotism which Sir Herbert Tree tells us is the message of the play.

## "REBECCA OF SUNNYBROOK FARM." AT THE GLOBE.

"Rebecca of Sunnybrook Farm," which Mrs. Kate Wiggin and Mrs. Charlotte Thompson have adapted from the former's "Rebecca" books, is, like its popular predecessor, "Mrs. Wiggs of the Cabbage Patch," one of those domestic dramas, very unsophisticated in form and very sentimental in feeling, but with touches of genuine observation and with opportunities for effective character-acting, that have always been popular with the American public. Rebecca is a child of thirteen, who, to relieve the family pressure at home, is consigned to the care of her maiden aunts, of whom the only one that counts is peculiarly cross-grained and harsh. But, though the little woman makes a bad start, her sweetness of nature and happy "Buntynism" gain everyone's affection, and bring her to a conclusion that, as she says, is "just like a fairy story." It will be gathered that the action is very slight, and the piece is, indeed, not so much a play as a succession of scenes, a little nosegay of rural American life. But there is a genuine value in its pictures of local manners, of a people who speak our own tongue, but are utterly unlike us in habits of thought and in outlook; and, though one could wish that the abundant sentiment was expressed with much more reticence, and that the homely humour of the piece was not so strongly emphasised, a certain freshness and whimsical interest cannot be denied the piece. The entire American company have been brought over for the London production, and most of the artists were new to this country. Miss Edith Taliaferro, who plays Rebecca, is so petite of stature that she looks a very child, and though her style is a little mannered, she makes the part effective and tolerably convincing. Among the rest mention may be made of the maiden aunt of Miss Marie Day, a genuine New England study; the garrulous Mrs. Perkins of Miss Ada Deaves, the warm-hearted village carrier of Mr. Archie Boyd, and the odd-job man of Mr. Sam Coit. The play evidently pleased the audience immensely, and the applause after each curtain was in a crescendo of enthusiasm.

[Other Playhouse Notes on "Art and Drama" Page.]

## AT THE BOOKSELLERS.

<b>NELSON.</b>	<b>ROYLEIDGE.</b>
General Booth. (Various.) 7d.	The Boy's Playbook of Science. Professor John Henry Pepper. 3s.
F. V. WHITE.	ALLEN.
Mother Mandarin. Fergus Hume. 6s.	County Churches: Nottinghamshire. J. Charles Cox. 2s. 6d. net.
MILLS AND BOON.	REHBERG.
The Wind Among the Barley. M. P. Willcocks. 6s.	Lamorna. Mrs. Alfred Sidgwick. 6s.
My Parisian Year. Maude Annesley. 10s. 6d. net.	The Heather Moon. C. N. and A. M. Williamson. 6s.
At Lavender Cottage. Mary L. Fensholt. 6s.	Devoted Sparks. W. Pett Ridge. 6s.
FISHER URWIN.	HURST AND BLACKETT.
China's Revolution. Edwin J. Dingle. 4s. 6d. net.	The Death Doctor. William Le Queux. 6s.
RIDER.	HEIKENWANK.
The Rake's Progress. Marjorie Bowen. 2s. net.	The Marriage of Kettle. C. J. Cuscliffe-Hynes. 6s.

## THE "COMET" CENTENARY AT GLASGOW

(Our Supplement.)

GLASGOW, as all the world knows, has been holding celebrations in honour of the Centenary of Henry Bell's little steam-boat, the *Comet*, launched on the Clyde a hundred years ago, and the first steam-propelled passenger-boat to ply regularly in British waters. Henry Bell little dreamed, perhaps, of the immense results which would grow out of that momentous, but at the time somewhat ridiculed, experiment. From it began the whole evolution of British steam-navigation, and, incidentally, the commercial prosperity of Glasgow. Therefore, Glasgow does well to honour the memory of her great son. In view of these events, we have thought the moment particularly appropriate to present our readers with an illustrated Supplement, dealing not only with the actual celebrations, but with the civic and industrial life of Glasgow generally, and especially, of course, with the great shipbuilding and shipping enterprises which form so important a part of the city's activity. The Supplement includes an article tracing briefly the origin and development of steam-navigation and the lives of its principal pioneers, illustrated with many portraits and relics. Other pages give photographs of Glasgow's leading men of the present day, while others, again, deal with the story of the Clyde Trust and its work. Some of the chief Transatlantic lines which run from Glasgow are also the subject of descriptive articles, as also is the modern method of rock-breaking and dredging. The whole Supplement is abundantly illustrated.

## GOETHE.

SIR J. SEELEY complained some time since that we have too few books about Goethe, and Mr. Joseph McCabe has sought to do something to remedy the defect. His "Goethe: The Man and his Character" (Eveleigh Nash) is the result, and will doubtless please the large section of the reading public that loves those intimate personal details and speculations upon the side of a great man's life which cease to have any significance when he dies. A man's loves and passions may be, in part, a motive-force in determining the direction of his work, but only the work remains. Mr. McCabe wields a clean pen, he does not write for the prurient, and, in these days of salacious biography, the absence of the muck-rake method must be counted to him for righteousness. At the same time, it seems to us that Goethe's relations with all manner of women who appealed to the sensuous or sensual side of him receive undue prominence, even here, nor is there any finality in his biographer's opinions. He corrects G. H. Lewes and the indefatigable Bielschowsky; he finds fault with the accuracy of "The Mother of Goethe," by Margaret Reeks, reviewed some months ago in these columns; but it follows as surely as the night succeeds the day that another commentator will arise in due course to denounce Mr. McCabe's opinions. The history of Goethe's countless intrigues is obscure, and lends itself to as many different views as any given number of biographers can muster. When all is said and done, these views do not matter; we can never ascertain the exact truth, and if we could, the discovery would be worth nothing. One who has not the lately developed taste for certain forms of biography wearied of the recitals of *haissons*. Whether Goethe's amours had been twice as many or half as many, his claim upon our regard would remain where it is. We turn with a sense of relief from the lengthy recital of a great man's weakness to the larger and more significant side of his life, to those curious excursions into the realm of Science, with which his latest biographer deals ably; to the association with Schiller, worth so much more to Goethe than all his sentimental aberrations; and to the effect of the Napoleonic era upon the poet's mind. These aspects of the great German's life merit the closest attention; they might claim more room than they find in the volume under discussion. We could have welcomed a detailed and extended consideration of all Goethe's work, and some estimate of his effect, not only upon German, but upon European thought. Perhaps at the present time it is not polite for a biographer to venture too far into such a field; we have to be grateful to Mr. McCabe for having kept in mind throughout his task the fact that he was not writing an account of amorous adventures and their consequences. For, other questions apart, Goethe was not always a dignified lover. There are times when he reminds us of Mr. Tracy Tupman.

## TERMS OF SUBSCRIPTION

TO

"THE ILLUSTRATED LONDON NEWS."

PAID IN ADVANCE.

<b>INLAND.</b>	Twelve Months (including Christmas Number), £1 9s. 3d.
	Six Months, 14s.; or including Christmas Number, 15s. 3d.
	Three Months, 7s. 10.; or including Christmas Number, 8s. 3d.
<b>CANADA.</b>	Twelve Months (including Christmas Number), £1 11s. 6d.
	Six Months, 15s. 3d.; or including Christmas Number, 16s. 6d.
	Three Months, 7s. 7d.; or including Christmas Number, 8s. 9d.
<b>ELSEWHERE.</b>	Twelve Months (including Christmas Number), £2.
<b>ABROAD.</b>	Six Months, 19s. 6d.; or including Christmas Number, £1 15s.
	Three Months, 9s. 9d.; or including Christmas Number, 11s. 3d.

Subscriptions must be paid in advance, direct to the Publishing Office, 172, Strand, in English money; by cheques, crossed "The Union of London and Smiths Bank, Limited"; or by Post Office Orders, payable at the East Strand Post Office, to THE ILLUSTRATED LONDON NEWS AND SKETCH, LTD., 172, Strand, London, W.C.

## NOTICE.

It having come to the knowledge of the proprietors of THE ILLUSTRATED LONDON NEWS that unauthorised persons have made use of the name of this journal and obtained money or credit thereby, notice is hereby given that the proprietors of THE ILLUSTRATED LONDON NEWS do not hold themselves responsible for representations or promises made by any person who does not produce written credentials from the Manager or Advertisement Manager of the paper, and that the production of such credentials should in all cases be required before any money is parted with or credit given.



# ELIZABETHAN BIG-NAVYISM: THE PAGEANT-PLAY, "DRAKE," AT HIS MAJESTY'S

PHOTOGRAPHS BY ILLUSTRATIONS BUREAU.



1. AN OUTLAW INTERRUPTS THE BOWLS ON PLYMOUTH HOE WITH THE NEWS THAT THE ARMADA IS NEAR, AND DRAKE DECIDES THAT THERE IS TIME TO FINISH THE GAME AND THEN TO BEAT THE SPANIARDS.
2. DURING THE ENCOMPASSING OF THE WORLD: DRAKE, HIS DRUMMER, AND HIS OFFICERS ABOARD THE "GOLDEN HIND" AT PORT ST. JULIAN.
3. QUEEN ELIZABETH, MUCH IN FAVOUR OF DRAKE'S "PIRACY," SNUBS LORD BURLEIGH, WHO CAN TALK OF NOTHING BUT THE WEAKNESS OF ENGLAND AND ADVOCATES THE BOWING OF THE KNEE TO SPAIN.

"Drake," which was produced at His Majesty's for the first time on September 3, is to all intents and purposes a big-navy play. In effect, Queen Elizabeth and Drake say: "We have given you a navy; we have shown you that that navy can fight; we have opened the seas of the world; see to it that they are never closed." Drake, indeed, standing before the west front of Old St. Paul's, says: "The little spot ye stand on has become the centre of the earth. From this day forward, the English merchant can rove whither he will, and

no man shall say him nay." In the first photograph Mr. Lyn Harding as Drake is seen in the centre; on his left are Mr. Henry Morrell as Sir George Sydenham, Miss Stella St. Audrie as Dame Sydenham, and Miss Amy Brandon-Thomas as Elizabeth Sydenham. In the centre photograph Drake is again the chief figure; and behind him is his Maroon-Indian drummer. In the third are Mr. Bassett Roe as Lord Burleigh, Miss Phyllis Neilson-Terry as Queen Elizabeth, and Mr. Lyn Harding as Drake.





BY G. K. CHESTERTON.

AS there is a thing called intensive cultivation, so there ought to be a thing called intensive reading; the reading of a sentence at a time, so as to feel the full weight of the common words we use. It would resemble, more than anything else, the verbal vigilance used in the atrocious task of proof-reading, on which I have been engaged for some days; that task in which one must be always on the look-out for the rising sun appearing as a rising bun, and in which the powdered flunkey of romance sent out to call a cab must be watched over to see that he does not call a cat instead. But while the proof-reader must be on the look-out for words that make nonsense, the intensive reader should be on the look-out for words that make sense, and seek to extract the real sense of them. If he takes any quite ordinary sentence, such as "Mary had a little lamb," he will find vistas of branching thought in every word. The word "Mary" reveals a forest of legends, creeds, and controversies. The word "had" is the pivot, on which Socialism, Capitalism, Syndicalism, and the whole dizzy wheel of our industrial age is perpetually turning. The word "little" opens the bottomless chasms of the philosophic arguments about relativity and differences of degree: as well as suggesting, when taken with its context, the mystery of affectionate diminutives and the love of limited things. At first sight it seems needless to speak of a little lamb, lambs being seldom gigantesque. But the poet talks of a "little" lamb as he patriot talks of a "tight little" island; because we all make a thing little when we want to make much of it. And as for the word "lamb," there really seems to be nothing from hagiology to housekeeping that could not be talked about in connection with it. There is something more in a word than its first derivation or its last definition. There is its value, the power and magic in it; and the learned even more than the unlearned seem to-day to be singularly listless and reckless about the value of words. I should say that "Mary had a little lamb" was generally said with more responsibility and realisation of the words than "England has a little Navy" or "Lloyd George is a Little Englander."

A wider way of using somewhat the same principle is to note in any proverb, story, or song that crops up by accident any traces of the large political or moral questions of the day. We can generally see more of how history has really gone by these glimpses into old human life than by pompous but partisan modern histories. For historians lie like travellers; and philosophic historians lie like fishermen (an equally philosophic class): but fables are never quite fabulous. I was amused to notice the other day that a complete analysis of all I think most crucial and complicated in our present national crisis could be worked out as an analysis of the song of "Sally in Our Alley." For, though that noble lyric belongs to a time long after the best ages of the Citizen and the Guild, it is in the tradition of these things and contains no hint either of modern Capitalism or modern Collectivism. Indeed, the song is full of phrases that linger living out of the Middle Ages. For instance—

My master comes like any Turk,  
And bangs me most severely.

This instinctive use of the Turk as the typical tyrant tells more than the histories ever do about that long wild war of all the West against Islam, and the flaming heart of the Crusades.

But the key of the song, for us here, is that it is the song of an apprentice. And its primary point and sharp lesson for our existing Capitalism is this: that if the apprentice is banged or debarred from marriage, it is because he is an apprentice, not because he is a proletarian. He is banged because he is young, not because he is poor. He is prevented marrying because he is young, not because he is poor. When his seven long years are o'er, oh, then he'll marry Sally. But modern Capitalism means that the clerk, when his seventy long years are o'er, finds his hopes of doing so rather less radiant than they were before. With the apprentice it was first

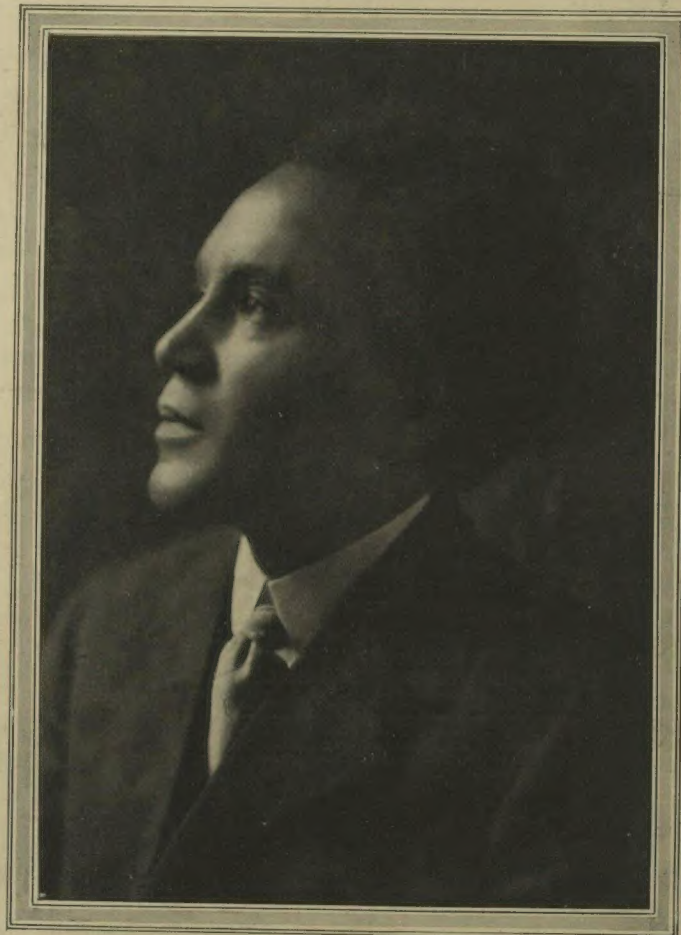
was already quite fitted to be a Citizen and Liveryman of London. But, indeed, he had no necessity for any disguise (except, doubtless, in the matter of meetings with Sally), because he had the thing that no modern industrial worker has—normal security for the normal fulfilment of his liberty and his love.

An exceedingly wise and forcible leading article which appeared recently in the *New Age* pointed out that both the guild and the family were really barriers against Capitalism; and that the industrial lords are now destroying the family as they have already destroyed the guild. It is not Socialism, but Capitalism that is the enemy of marriage.

It is not the working class who ought to be or who are breaking down the doors and windows of domesticity; it is the great employers with their loveless hives, their homeless living-in, their compulsory Insurance Acts, their impudent money-boxes, their fines, their uniforms, their perpetual appeal to the school, to the prison, to the mad-house, to the hospital—to anything rather than the home. It is not "L'International" that Socialists ought to be singing; they ought to be rousing us (in a thundering chorus) with "Sally in our Alley."

For Sally is in a very narrow alley just now—a long lane that has no turning, and where she does not always even meet the apprentice at last. I know some of the modern industrial women say they like the modern industrial life: all I can say is that, if they do like it, they are the only people who do. The employer is quite as anxious to get away to the golf links as the workman to get away to the public-house; the banker has quite as many mad impulses to go to Cannes as the clerk has to go to Canada. But the majority of working women one meets do not even pretend to think their situation normal, but defend it (quite justly) as being an unusual necessity in their case. I do not believe the ordinary woman (or the ordinary man, for that matter) even prefers the freedom of celibacy, or the fierce exposure of competition. I do not believe (in short) that Sally likes being Aunt Sally, or the game in which the world throws things at a spinster.

There is another thing to remember about the banging individual with the amorous apprentice. If the master banged, it was because the master was a schoolmaster. If the apprentice in question was, let us say, a shoemaker's apprentice, then the man over him was not merely his employer. The man over him was something, at least, nobler than a capitalist: he was a shoemaker. His power was not in the mere fact that he could pay money to other people to be shoemakers for him; it was in the fact that other people had to come to him to learn shoemaking. He was a master, not in the sense that we speak of masters and men in a coal strike; he was a master in the sense that we speak of a Master of Arts. He ruled his apprentices because he was more of a workman than they. The modern capitalist rules his workmen because he is not a workman at all. And anyone who is really more of a workman is generally more of a man; and the arrangements of the old crafts and guilds, while they may have permitted some virile vices, permitted also the virile virtues. The old system expected the marriage of the apprentice. The present system expects nothing but clerking from the clerk.



Cassara-Portrait by Hopfl.

THE MUSICAL INTERPRETER OF "HIAWATHA": THE LATE MR. SAMUEL COLERIDGE-TAYLOR, THE WELL-KNOWN COMPOSER.

Mr. Coleridge-Taylor, who died of pneumonia on September 1 after a very short illness, was born in 1875. His father was a native of Sierra Leone, and his mother an Englishwoman. His reputation as a composer was largely based on his settings of Longfellow's "Hiawatha," including his first important work, "Hiawatha's Wedding Feast," first performed at the Royal College of Music (where he was trained) in 1898, and two other cantatas, "The Death of Minnehaha" and "The Departure of Hiawatha." At the time of his death he was also composing a ballet of "Hiawatha." Among his other works were an oratorio, "The Atonement," given at Hereford in 1903, and a cantata produced last year, "A Tale of Old Japan," set to the poem by Alfred Noyes. Mr. Coleridge-Taylor was very popular as an adjudicator at competitive choral festivals, and as a teacher.

slavery and then liberty; for the clerk it is perpetual slavery combined with perpetual insecurity. Sally's lover suffered from sorrows that time itself normally tended to cure. He was only too young at seventeen; he was not "too old at forty." In our grand moral capitalist society of to-day it is a common thing for a man to dye his white hair black in order to keep his situation—the capitalists' commentary on the sacred text that grey hairs are a crown of glory. But if the apprentice in the song had gone in for any disguise, it would rather have been the other way about. I suppose he would have whitened his head with flour, or stolen his master's spectacles, or walked with a light limp, to indicate that he

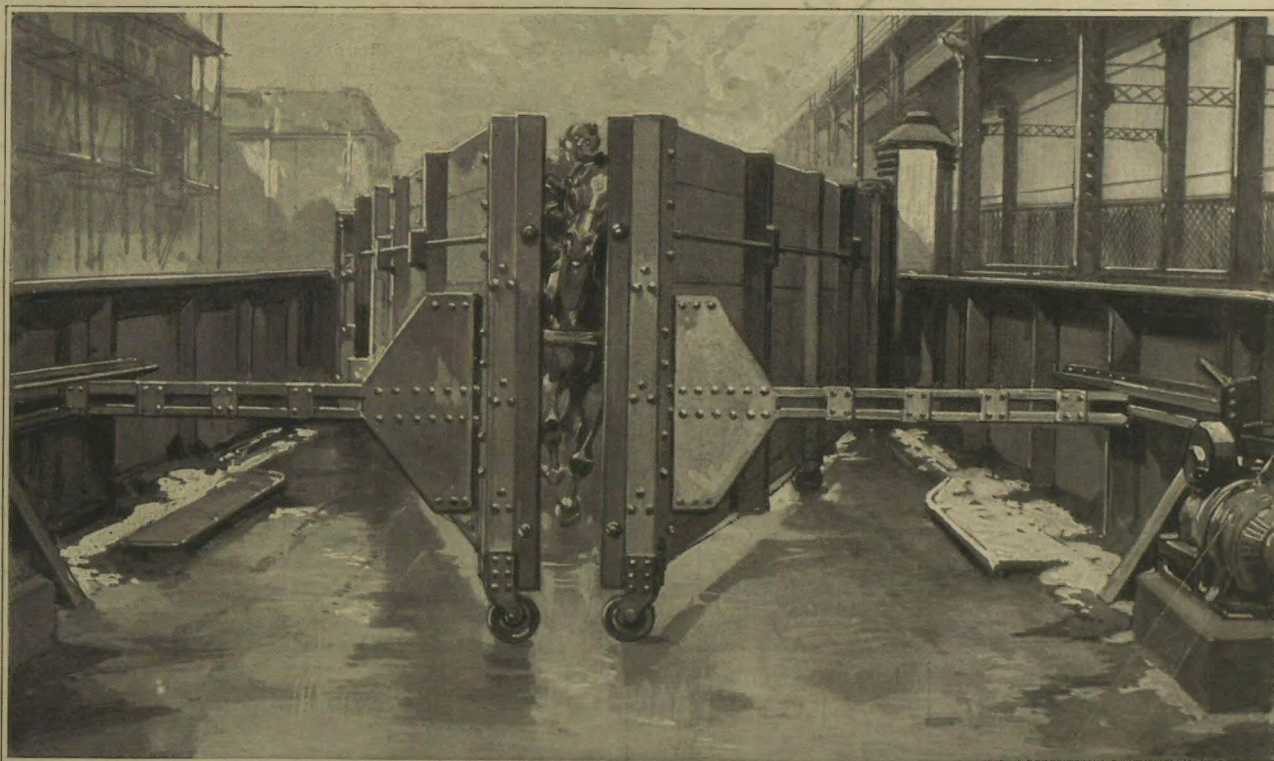


## BOTTLE-NECKING FOR RUNAWAYS: A DEVICE FOR STOPPING HORSES.

DRAWN BY H. W. KOEKKOEK FROM PHOTOGRAPHS IN THE PRIVATE BULLETIN OF THE NEW YORK EDISON COMPANY.



A GATE, WORKED BY ELECTRICITY, DESIGNED TO BRING RUNAWAY HORSES TO A STANDSTILL: THE DEVICE CLOSED, SHOWING HOW ITS SIDES NARROW TO CATCH THE HUBS OF THE WHEELS AND SO STOP THE VEHICLE.



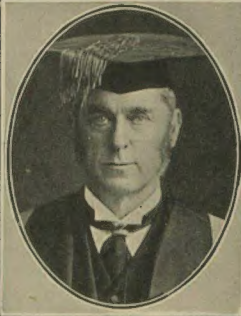
THE WHEELS OF THE CART CAUGHT BY THE WALLS OF THE GATE AND THE HORSE STOPPED: THE "RUNAWAYS" GATE" IN USE.

Our correspondent, sending us the photographs from which these drawings were made, says, of the electric gate installed recently on the Williamsburg Bridge, New York, for the catching of runaway horses: "The bridge used to be notorious for the number of runaway horses which, week by week, crashed into a barrier which had been installed halfway over it, and was swung round on the approach of the frightened animal by the policeman stationed there. A bridge department labourer submitted to the Bridge Commissioner a simple plan to stop the killing and injuring of horses by this device. His idea was to check the horse before he could come in contact with the restraining barrier. A new gate was built, consisting of two

parts. These were placed parallel to the sides of the bridge. When needed they were swung out by electric power to the centre of the bridge, until they approached within a foot of each other. The scared horse makes for this opening, but before he reaches it, the wagon has been caught—the narrowing sides of the gate have gripped the hub of the wheels, and the animal is powerless and unharmed. All the checking power has been applied from the rear, and the horse finds himself shouldered with a burden he cannot move. After a few seconds he calms down, and is driven away. This gate has stopped over one hundred runaways, not one of which was seriously injured. Others of its kind are likely to be set up at various points."



## PORTRAITS &amp; PERSONAL NOTES.



## ALDERMAN

**Charles Gabriel Beale**, who died at Birmingham on Sept. 1, was Lord Mayor of that city in 1897 and the two following years, and was Vice-Chancellor of Birmingham University. Last year he became more widely known as a member of the Royal Commission appointed during the Railway Strike to inquire into the men's trade unions objected to his serving on the Commission owing to the fact that the firm of solicitors to which he belonged—Messrs. Beale and Co.—were solicitors to the Midland Railway. The Board of Trade replied that he, personally, had not for many years acted legally for any railway company, but his municipal and educational work in Birmingham had taken up all his time.

*Photo. C.N.*  
**THE LATE ALDERMAN C. G. BEALE**,  
Formerly Lord Mayor of Birmingham—prominent during the Railway Strike last year.

St. George's Hospital and Chief Surgeon, for the last eight years, to the Metropolitan Police. He was the author of many medical treatises. His career as a climber began in 1872, when he joined the Alpine Club, of which he was President in 1887. He made the first ascent of the Aiguille du Dru, and of the Rothhorn from the Zermatt side.



*Photo. Lafayette, Dublin.*  
**THE LATE LADY CLARINA**,  
Who died from injuries in a carriage accident at Limerick.

made wholly (except the engines) in the United Kingdom. His present machine, which save for the engine, he invented, designed, built and piloted himself, has been bought by the War Office for £1000. Mr. Cody, who is now fifty-one, had a reputation for horsemanship before he took up air-navigation. He began with kites, and in 1906 he was appointed by the War Office chief instructor in kite-flying. The same year he was naturalised as a British subject. He was flying at Aldershot some months before Wilbur Wright's first public flights in France. In September 1909 he made a record for a forty-mile cross-country flight, and in 1910 he won the British Michelin Cup for a duration-flight of four hours forty-seven minutes.

Lady Clarina, who was badly injured in a carriage accident at Limerick on Aug. 20, died nine days later in a nursing home in that town. She was formerly Miss Sophia Mary Butler, daughter of the late Mr. James Butler, of Castle Crine, County Clare. Her marriage to the fifth Baron Clarina, as his second wife, took place in 1887. She had four daughters, the eldest of whom was married two years ago to Mr. E. B. Butler-Henderson.

Colonel Telfer-Smollett, who was killed in the overturning of a motor-car in Ayrshire, was a descendant of Tobias Smollett, the novelist. He entered the Army in 1874, retiring in 1891. When the South African War broke out, he was recalled to the active list, and appointed Deputy - Assistant - Adjutant - General at Edinburgh. He was a J.P. for Dumbartonshire, and two years ago was Unionist candidate in the Perth Burghs election.

Lord Grey de Ruthyn bore his part, as Hereditary Bearer of the Great Gold Spur, in the Coronations both of King Edward and King George. The late Peer was born in 1858. His father, who is still alive, is Mr. Augustus Wykeham Clifton, of Warton Hall, Lytham; his mother was the late Lady Grey de Ruthyn, whom he succeeded in 1887. She was a sister of the last Marquess of Hastings. In 1892 he married Miss Evelyn Foster, daughter of Mr. James Foster, of Cranborne Hall, Windsor Forest. She died seven years ago, and her only child died in the year of his birth, 1893. Lord Grey de Ruthyn is, therefore, succeeded by his brother, the Hon. Cecil Talbot Clifton.



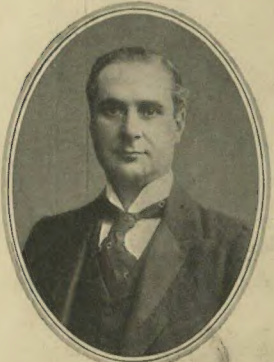
*Photo. Voigt.*  
**WELL AGAIN, AND ABLE TO ATTEND THE SWISS MANŒUVRES.**  
A NOTABLE NEW PORTRAIT OF THE KAISER.

Mr. S. F. Cody's persevering efforts and dauntless courage in the cause of aviation at last received their due reward by his success in the Military Aeroplane



*Photo. L.N.A.*  
**WINNER OF £5000 IN THE MILITARY AEROPLANE COMPETITION.**  
MR. S. F. CODY IN HIS BIPLANE.

Competition, as a result of which he has been awarded by the Army Council the first prize of £4000 for his biplane in the class open to aeroplanes made in any



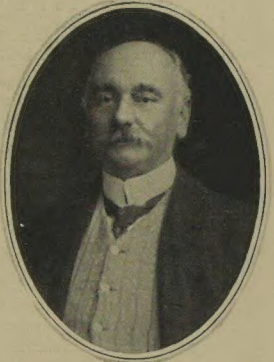
*Photo. Russell.*  
**THE LATE MR. L. A. BIDWELL, F.R.C.S.**,  
Surgeon to the West London Hospital.

was a well-known specialist. His "Handbook of Intestinal Surgery" is in its second edition. Mr. Bidwell was also a Surgeon-Major in the Bucks Yeomanry, and among other appointments held those of Consulting-Surgeon to the City Dispensary and the Blackheath and Charlton Hospital.

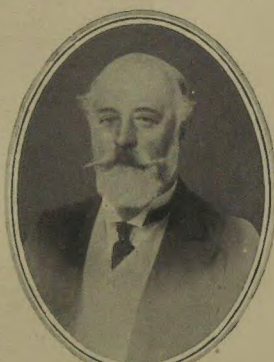
Everyone was glad to hear that the Kaiser had recovered from his recent indisposition and that he had returned to Berlin full of vigour and good spirits. At a banquet in the royal castle in honour of the Province of Brandenburg, he made a very optimistic speech, favourably comparing the present state of Germany with that of the past. "Protected by an Army ready for battle," he said (to quote the *Times*), "and by an evergrowing Navy, from foreign arrogance, and from the onslaughts of war, the countryman is able in our ordered commonwealth to till his land, the merchant, the manufacturer, and the artisan to follow each his business, and the labourer to be certain of his well-deserved hire."

On Sept. 2 the Emperor left Berlin for his visit to Switzerland and the Swiss Manœuvres. He received an enthusiastic welcome on his arrival at Zurich.

Mr. Clinton Dent was equally famous both in his profession of surgery and in his recreation—that of mountaineering. He became a Fellow of the Royal College of Surgeons in 1877, and later was its Vice-President. Among the important appointments which he held were those of Surgeon and Lecturer at



*Photo. Elliott and Fry.*  
**THE LATE COL. TELFER-SMOLLETT**,  
Who died from injuries in a motor-car accident in Ayrshire.

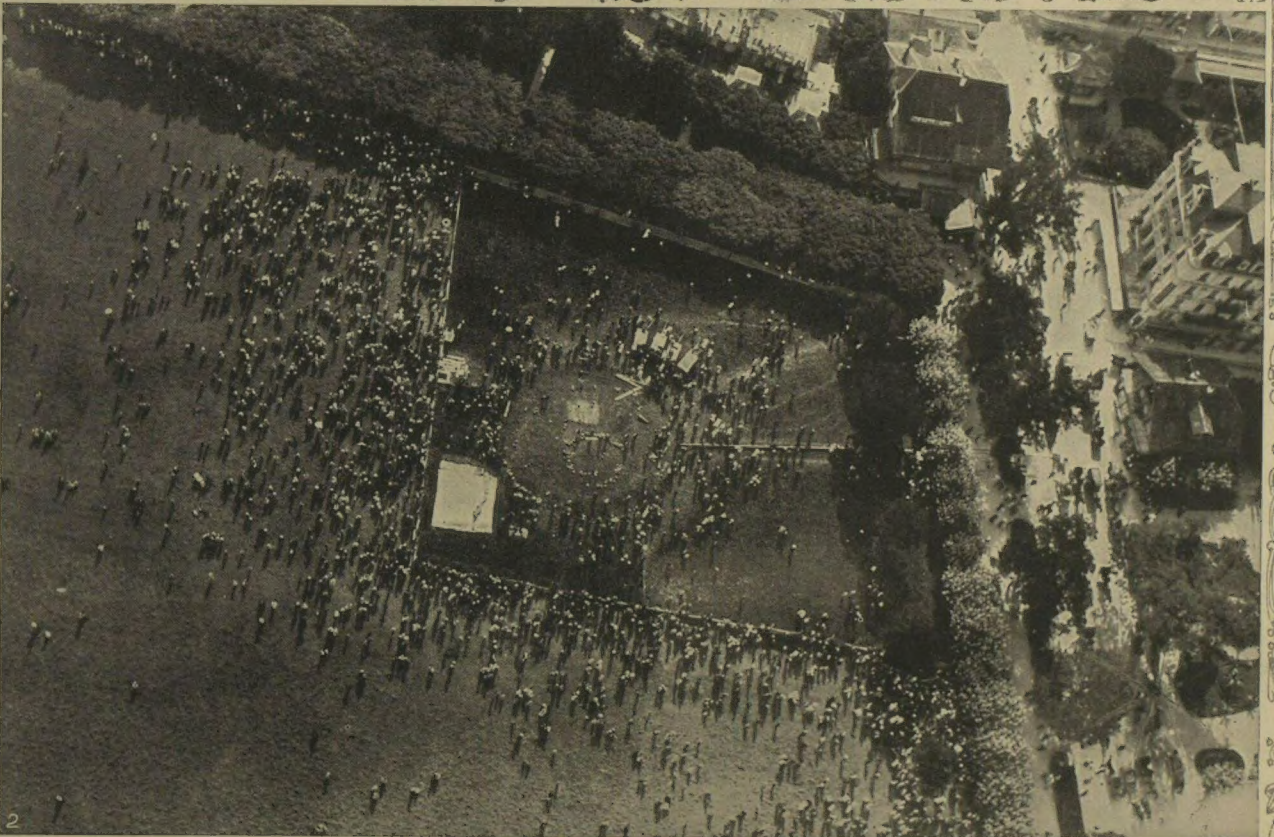


*Photo. Bullingham.*  
**THE LATE LORD GREY DE RUTHYN**,  
The 24th Baron, and Hereditary Bearer of the Great Gold Spur.



## THE ALPS FROM ABOVE: A CROSS-MOUNTAIN BALLOON JOURNEY.

PHOTOGRAPHS BY ILLUSTRATIONS BUREAU.



1. PHOTOGRAPHED WHILE THE BALLOON WAS AT A HEIGHT OF 17,000 FEET: CLOUDS ON THE MOUNTAIN TOP, TAKEN FROM CAPTAIN SPELTERINI'S BALLOON.

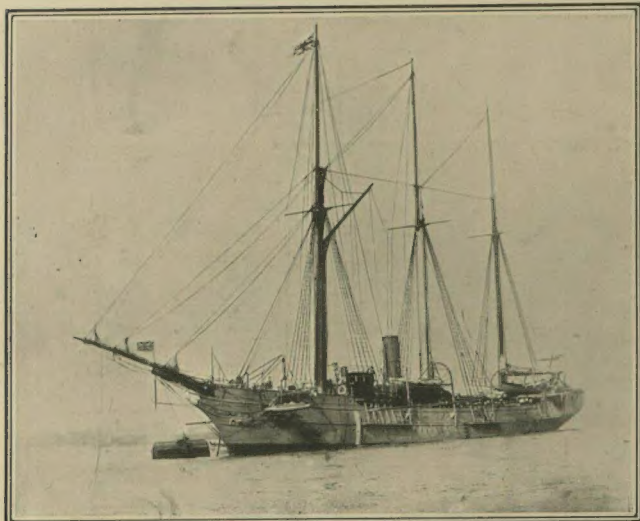
2. PHOTOGRAPHED AT THE START OF THE RECORD CROSS-MOUNTAIN AIR-VOYAGE: INTERLAKEN FROM ABOVE, SHOWING THE CROWD WATCHING THE BALLOON AS IT LEFT THE PLACE OF ITS INFLATION IN SWITZERLAND.

It will be remembered that on two or three occasions we have published in "The Illustrated London News" very remarkable photographs of mountain tops and passes photographed from a balloon by Captain Spelterini. A few days ago the Captain, accompanied by Mr. Console as photographer, started by balloon from Interlaken and drifted across the Alps to Unter Ammergau, in Upper Bavaria. There both pilot and passenger were detained by the police for

an hour and a half, presumably on the suspicion of being spies, and were then released without explanation. The distance covered in the fourteen and a-half hours of the journey was not less than 250 miles, and the record altitude of 17,550 feet was attained. Bitterly cold weather was experienced, during the night more particularly. The crossing of the Central Alps by balloon was in itself a feat never before accomplished.



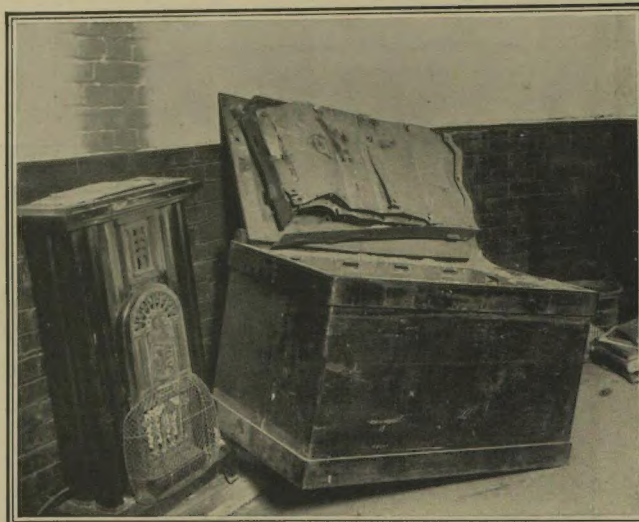
# FROM THE WORLD'S SCRAP-BOOK.



*Photo. Cribb.*

SUNK IN COLLISION WITH A COLONIAL STEAMER, AND NOW UNDER FOUR FATHOMS OF WATER: H.M.S. "WATERWITCH," A SURVEYING-VESSEL.

The Secretary of the Admiralty issued a statement the other day that a telegram had been received from Singapore to the effect that H.M.S. "Waterwitch" had been in collision with a Colonial steamer, and had sunk in four fathoms of water; and that a private of the Royal Marine Light Infantry and a Chinese officers' steward were missing. The "Waterwitch," which was of 620 tons, was originally a yacht, and known as the "Lancashire Witch." The Admiralty purchased her for use as a surveying-vessel, and she was re-commissioned at Hong-Kong last March.



*Photo. London and Provincial Press Agency.*

OPENED WITH THE AID OF NITRO-GLYCERINE: THE TON-AND-A-HALF SAFE FORCED BY BURGLARS AT THE LONDON HIPPODROME.

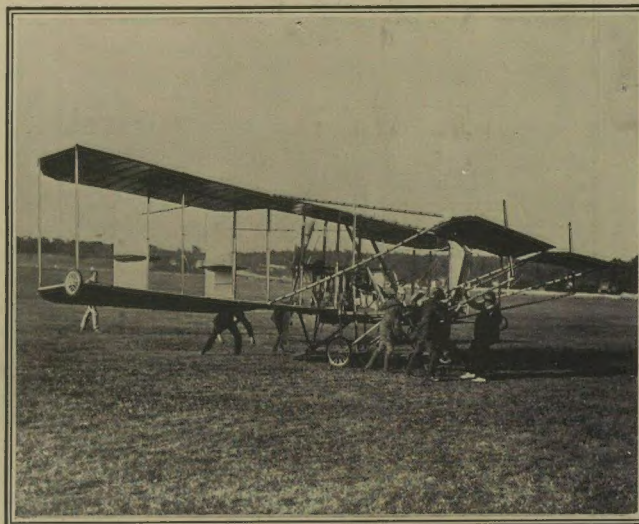
There was a daring burglary at the London Hippodrome early on the morning of September 2, and the thieves, who rendered the watchman unconscious, it is believed with ether, and blew open a safe with nitro-glycerine, or some other explosive, got away with between four and five hundred pounds in gold, silver, and notes. The only clue to the thieves seems to be a tiny piece of a shrapnel shell with a gold plate bearing the words "South Africa, 1900." This had probably formed a watch-chain charm.



*Photo. King's Agency.*

SAID TO BE AT LEAST AS GOOD AS THE VERY SUCCESSFUL CODY "CATHEDRAL": THE ROYAL AIR-CRAFT FACTORY'S BIPLANE "B.E.2."

It is said of the experimental biplane "B.E.2," here shown landing on ploughed ground, that it acquitted itself as well as Mr. Cody's winning biplane during the recent Army tests, in which it competed unofficially under the pilotage of Mr. de Havilland. Amongst other things, it set up a new British record for altitude with a passenger.



*Photo. News. Illus.*

WINNER OF £5000 AT THE RECENT ARMY AEROPLANE TESTS: THE CODY BIPLANE NO. 31 (BRITISH), OTHERWISE "THE CATHEDRAL."

Mr. S. F. Cody, flying his large biplane, which is familiarly known as "the Cathedral," won the first of the prizes open to the world for aeroplanes made in any country—that is to say, £4000; and the first prize of £1000 open to British subjects for aeroplanes manufactured wholly in the United Kingdom, except the engines.



*Photo. G.P.U.*

AFTER AN ACCIDENT WHICH RESULTED IN ONE DEATH AND INJURIES TO OVER TWENTY, THE WRECKED CARRIAGES IN VAUXHALL STATION.

A curious accident took place in Vauxhall Station on August 29, when a light engine, running with tender in front, ran into the rear of a stationary train which had left Aldershot for Waterloo at 6.25 a.m. Two carriages were telescoped. One passenger was killed; four were detained in hospital; and seventeen were able to proceed home after treatment at the hospital. Tickets were being collected at the time of the mishap, and no one seems to have noticed the approach of the light engine. An hour and a half passed before all the passengers could be extricated. An inquiry is, of course, being held.



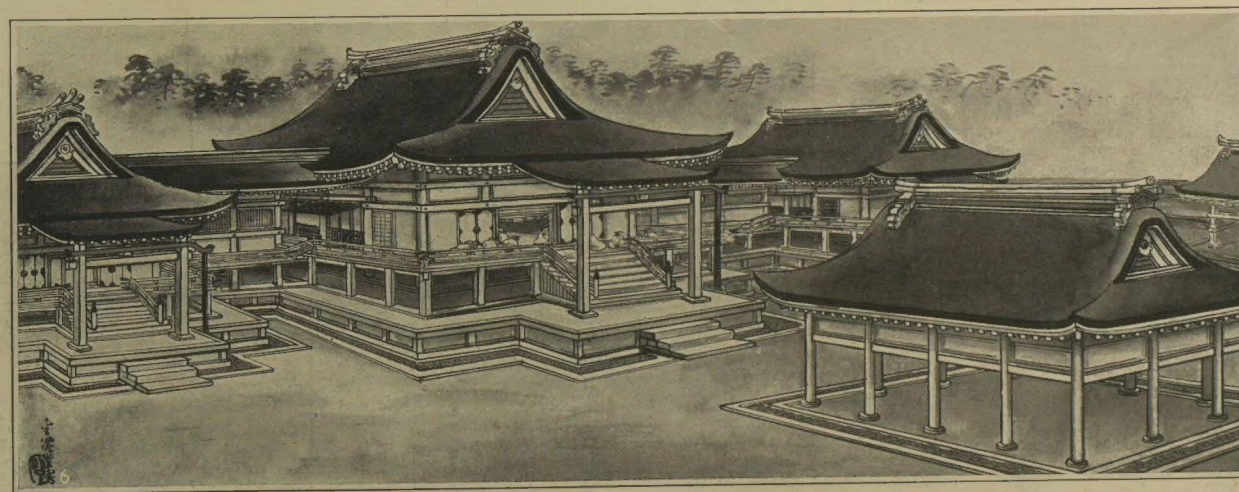
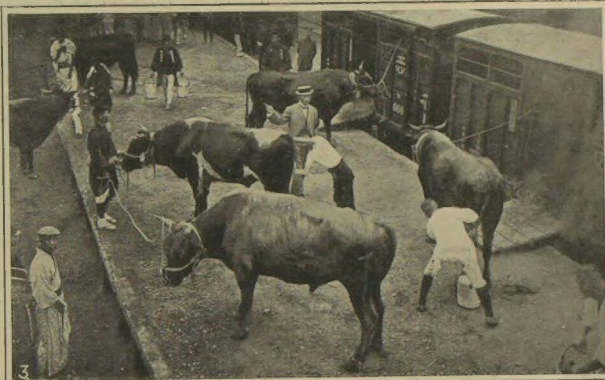
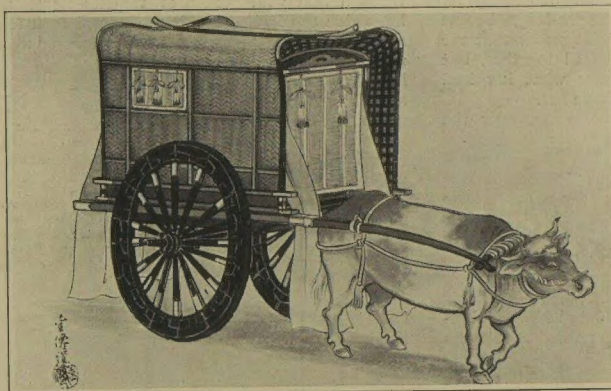
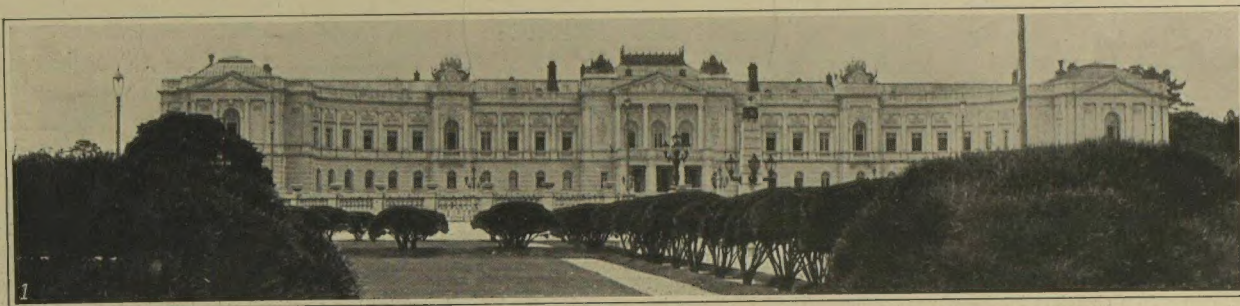
*Photo. G.P.U.*

SHOWING THE TELESCOPED COACHES IN VAUXHALL STATION, THE SCENE OF THE ACCIDENT: AFTER THE RAILWAY DISASTER ON THE L. AND S.W.R.



## FOR A RULER WHOSE SPIRIT WILL BE WORSHIPPED: TOKIO PREPARATIONS.

DRAWINGS BY A JAPANESE ARTIST; PHOTOGRAPHS BY ILLUSTRATIONS BUREAU.



1. A CONTRAST TO OUR DINGY BUCKINGHAM PALACE: THE NEW IMPERIAL PALACE, AT TOKIO, INTO POSSESSION OF WHICH THE EMPEROR HAS NOT YET ENTERED.
2. DRAWN BY AN OX: THE COFFIN OF THE LATE EMPEROR OF JAPAN BEING CONVEYED TO THE IMPERIAL PALACE.
3. TO BE GRANTED COURT RANK: OXEN WHICH WILL DRAW THE CATAFALQUE ON WHICH THE EMPEROR'S COFFIN WILL REST.

Preparations for the funeral of the late Emperor of Japan are proceeding apace; and last week Prince Arthur of Connaught, to whom, by the way, rumour gives a royal dukedom on his return, left London for Tokio to represent the King. The public lying-in-state is taking place in the Grand Hall of the Palace, where the coffin will remain, until the evening of the funeral service, watched by dignitaries, including Privy Counsellors, Ministers of State, and members of the Genro. "A room in the Palace adjoining that in which the death occurred has been set aside," reports Reuter, "as a sanctuary for the spirit of the dead monarch, and there

4. MAKING SPECIAL ROADS FOR THE IMPERIAL FUNERAL: A TRACTION-ENGINE MUCH IN EVIDENCE.
5. ONE FOOT OF GRANITE BLOCKS: LAYING THE FOUNDATION OF A NEW ROAD FOR THE IMPERIAL FUNERAL.
6. WHERE THE LATE EMPEROR DIED AND WHERE MANY CEREMONIES ARE BEING HELD: THE OLD IMPERIAL PALACE AT TOKIO.

solemn services will be performed until the close of the year of mourning, when, with much pomp and solemnity, the spirit will be transferred to the Imperial Sanctuary, within the palace, to join and be worshipped with the spirits of the other Imperial ancestors." According to precedent, the coffin of the Emperor will be borne to its resting-place on a two-wheeled catafalque of cypress wood drawn by four oxen, which, also in accordance with custom, will be granted Court rank. The funeral service will begin, at midnight, on the parade ground at Aoyama, on the outskirts of Tokio; and the actual interment on the following night, at Momoyama.



VIGNETTES  
OF THE  
BRITISH EMPIRE:  
IV.—CEYLON.

I HAD left Kandy by train at seven o'clock one morning. There had been heavy rain during the night and the hills were hidden under rolling clouds of mist. Here and there, beside the railway, appeared the warm-coloured huts of a village, with all its chocolate inhabitants squatting outside to watch the daily wonder of the passing train.

A few hours brought me to Telawakele, the heart of Ceylon tea-growing, the rows of little bushes ruling sunlit

hills with close, straight, thin lines of shadow on the red, bare earth. I visited two fine waterfalls in this neighbourhood, and then went up through the forest scenery of higher ground to Newara Eliya.

Since 1874 a Government order has been in force prohibiting the sale of jungle-land over 5000 feet high for cultivation purposes. If more of the jungle were cleared away the lower lands would be robbed of water.

The "season" at the little European hill settlement had not yet begun, and the moist air was muggy and uncomfortable. It was an easy, rather monotonous, walk to the summit of Dom Pedro, the highest point in Ceylon; many of the trees I passed were covered with long grey lichens, as if matted with unkempt hair. As I looked round from the stone cairn at the top, all the far distance was hidden by cloud battalions, but the lake of Newara Eliya and its race-course and golf links, its club-house and hotels, were clear enough below.

I drove to the east out to Hakgalla, the botanical gardens. The mean temperature there is 59 to 60, and although the gardens are 5500 feet high, only twice during the past twenty-five years has a frost been recorded. About Hakgalla there is

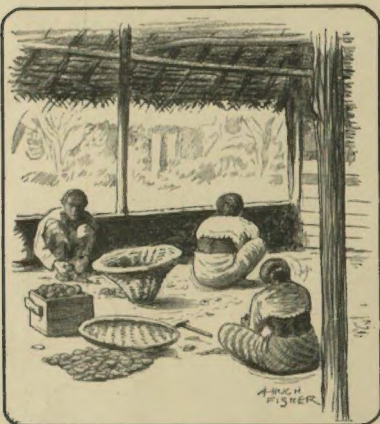
the natives cannot usually afford to keep dogs. A few days previously the curator had shot a pair of leopards, one of which had killed a cow in a neighbouring village. The "kill" was left, and when the leopard returned to it, the curator was ready for him. The same night the she-leopard came to feed upon the cow. It seems that the male and female never feed together, but that the she-leopard takes what her lord and master chooses to leave her.

Looking east from Hakgalla, over the Uva Province, the hills are quite bare of jungle and covered with the coarse grass of what is called *patna* country. It is not very good for grazing, except for a short time every year after the natives have burnt it off, when the young grass is better. Over this *patna* land of the Uva plain I could see in the distance Diyatalawa and the camp where the Boer prisoners were kept, now used for the Ceylon Army and Navy Volunteers. One old Boer, who refused to take the

of wattle and daub instead of gingerbread, and you never know whether the chocolate people are witches or not, though some of them are very ugly. After another night at Ratnapura I started down the Kela Gange (the Black River) on a native boat. Swiftly we glided hour after hour through that wild garden of tropical luxuriance. Here large clumps of giant bamboos drooped their feathery foliage over the water—there a temple appeared upon a wall of rock, below which a priest was bathing in the river, while his yellow robe, left in a heap on the sand, gleamed in the sunlight like burning topaz. Water-buffaloes, deep in the stream, just showed their backs and noses above water, and elephants, more sportive, indulged in unwieldy gambols. And I also, accepting this general order of the bath, dived into the Kela Gange and tried my strength against the powerful current.

Less than half-way to the sea, up among the hills on the southern side of the river, an English syndicate is working a plumbago mine with first-class machinery and expert engineers. I stopped to visit this mine, and in its dark "levels," blasted out of the gneiss rock in the bowels of the earth, saw the plumbago being hacked out in lumps. Near the top of the shaft, in a small wooden box, three little votive lamps are always kept burning—one light for God, one for the company, and one for the miners.

During the second day of the river journey came the shooting of some rather gentle "rapids," where brown rocks thrust their noses out of the water and we rushed down splashing on a slide to lower level. At last, some miles after we had passed the opening of the Kelani River Canal, the long bridge of Kaletura appeared at the river mouth with a line of fiery sunset sky behind it, and I saw again the railway, and that fringe of cocoanut palms against the sea which more than any other detail is typical of Ceylon.—A. HUGH FISHER.



WHERE BLACKLEAD COMES FROM: "CURING" PLUMBAGO, AT A CEYLON MINE.

Ceylon is the chief source of plumbago, the familiar blacklead used for stove-polishing and pencils.



CINGALESE SUPERSTITION: A "LUCK-POLE" ON THE SITE OF A NEW HOUSE IN CEYLON.

oath of allegiance, was still living in Ceylon. He received thirty rupees per month from the Treasury, and as he was, of course, a good shot, he spent his days in hunting, and added to his income by selling skins.

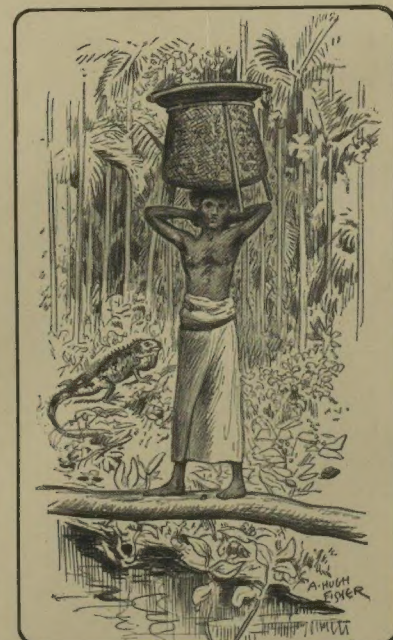
I wanted to see the "gemming" country, and journeyed by train to Avisawela, whence I drove by coach the twenty-six miles to Ratnapura; it was late in the afternoon when at last I reached Ratnapura rest-house, and Adam's Peak itself appeared over the jungle, glorious under warm, rosy cloudlets that seemed to be playing a game of "touch mountain" as they passed from one pinnacle to another. The rest-house is pitched high up on the hillside, and in front of it the broad Kela Gange river gleamed that night under the stars, and the mysterious gloom of the forest brooded behind a curtain of winking fire-flies.

Just after dawn next morning I started out to walk through the jungle to visit various gemming pits, becoming intimately acquainted on the way with the pertinacity of Ceylon leeches. The trees are so close together in that forest, and just when you think you are far from any sign of man but the path you are treading, you come upon a whole village. It is like the country of a fairy-tale, only the thatched huts are made



A DOLCE FAR NIENTE IN CEYLON: A NATIVE IN A ROADSIDE "REST."

Here and there by the wayside in Ceylon are wooden she'ters, or "rests," in which the traveller may enjoy a siesta.



HOW THE BAKER GOES HIS ROUNDS IN CEYLON: A NATIVE CARRYING BREAD THROUGH THE JUNGLE.

good hunting with plenty of sambur (called elk by the English there). Shooting sambur is now prohibited, and it is hunted with dogs and knives. This not only helps to preserve the game, but gives Europeans a better chance, as



# IN A BRITISH "SUMMER ISLE OF EDEN": TRAVEL ON THE KELA GANGE.

DRAWN BY OUR SPECIAL ARTIST, A. HUGH FISHER.



A WHITE MAN ON THE BLACK RIVER: BOATING UNDER NATIVE CONDITIONS IN CEYLON.

"After another night at Ratnapura," writes Mr. Hugh Fisher, "I started down the Kela Gange (the Black River) on a native boat. Swiftly we glided hour after hour through that wild garden of tropical luxuriance. Here large clumps of giant bamboos drooped their feathery foliage over the water—there a temple appeared upon a wall of rock, below which a priest was bathing in the river, while his yellow robe, left in a heap on the sand, gleamed in the

sunlight like burning topaz. Water-buffaloes, deep in the stream, just showed their backs and noses above water, and elephants, more sportive, indulged in unwieldy gambols. And I also, accepting this general order of the bath, dived into the Kela Gange, and tried my strength against the powerful current. . . . During the second day of the river journey came the shooting of some rather gentle 'rapids.'"



# A CALL TO THE SPIRIT OF PATRIOTISM IN THE ENGLISH PEOPLE: THE PAGEANT-PLAY, "DRAKE," AT HIS MAJESTY'S.

DRAWN BY OUR SPECIAL ARTIST, A. FORESTIER.



## WITH A MORAL FOR TO-DAY AND A POPULAR APPEAL: DRAKE UPHOLDING THE OLD TRADITIONS OF ENGLAND'S SUPREMACY AT SEA, AND ACCEPTING THE SPANISH COMMANDER'S SURRENDER.

Sir Herbert Tree arranged to present Mr. Louis N. Parker's pageant-play, "Drake," at His Majesty's Theatre, on Tuesday, September 3. Speaking of it to a "Daily Chronicle" representative before its production, he said: "It is a call to the spirit of patriotism in the English people. We see England in the vigorous days of Elizabeth faced by a great peril, and rising to meet it with dauntless courage. It has a moral for the present day, and will surely make a popular appeal to the spirit of the race. It upholds the old traditions of England's supremacy at sea, and is an object lesson of the value of individual courage and character. Drake himself is a great part. We see the man as he was, a rough Devonshire seaman, with heroic qualities, with a simple faith, with a

keen, strong, daring, and indomitable spirit. He is the type of the Elizabethan adventurer, and of all that was fine and hardy in the character of the Elizabethan man of action. There is a good plot in the play which moves swiftly forward, and a very charming love story between Drake and Elizabeth Sydenham." The scenes include a Chamber at Hampton Court, 1571; the Dash across the Isthmus of Darien; the Quay at Plymouth; Drake's Garden at Plymouth, in 1577; On Board the "Golden Hind" in Port St. Julien; the Deck of the "Golden Hind" at Deptford; Plymouth Hoe; On Board the "Revenge"; and Old St. Paul's. Mr. Lyn Harding is Drake; Mr. Herbert Waring, John Doughty; Mr. A. E. George, Tom Moore; Miss Amy Brandon-Thomas, Elizabeth Sydenham; and Miss Phyllis Neilson-Terry, Queen Elizabeth.



# Art-Music & the Drama



Photo. Ellis and Wacey.  
THE QUEEN ELIZABETH OF "DRAKE," AT  
HIS MAJESTY'S: MISS PHYLLIS NEILSON-  
TERRY



A DRAMATIC PERFORMANCE AT COVENTRY, EARLY IN THE NINETEENTH CENTURY



Photo. White.  
THE MISS LLEWELYN OF "LITTLE  
LLEWELYN" AT THE VAUDEVILLE:  
MISS HILDA TREVELYAN.

## ART NOTES.

MORE interesting than Meredith's discovery of Titian, Giorgione, and Veronese in Venice—"I cannot rank Tintoret with them," he writes in one of the newly published letters to Mrs. Ross—is his discovery of Leighton in the Academy of 1861: "Leighton has a *Paolo and Francesca* painted just as the book is dropped and they are in no state to read more. You would scorn it; but our friendship never rested on common sentiments in art. I greatly admire it. I think it is the sole English picture exhibiting passion that I have seen. I have the delight to stand alone in my judgment of this, as of most things, and I shall see the world coming round to my opinion and thinking it its own. Does not that smack of the original George M?" The world came round to Leighton long before it came round to Meredith, or his opinions.

Leighton's Presidency and Barony do not smack at all of G. M. And when they came, what of the prophet? Was he a Leighton man to the end; or did he, forging ahead of the community somewhere in the 'eighties, have the delight to stand alone, until the world came round again, in the depreciation of a painter then most popular?

But Meredith did not stand alone in 1861. Even in 1855 Leighton had been watched. Ford Madox Brown's diary for May 22 of that year reads: "Leighton's picture a mere daub as to execution, but finely

from the general dreariness in black and white associated with his writings. The Charles Keene tradition clings to him—the Charles Keene tradition at its worst; and Tenniel's drawing for his "Song of Courtesy" achieves the summit of Victorian dowdiness. But let us say boldly



Photo. Foulsham and Banfield.  
MUCH AS HE APPEARS IN "DRAKE," AT HIS  
MAJESTY'S: MR. LYN HARDING—AS SIR WALTER  
RALEIGH.

Mr. Lyn Harding is appearing as Drake in the pageant-play of that name at His Majesty's.

that the poem is no better. Du Maurier's style "dates" too fixedly to make a fitting accompaniment for prose that is always fresh. Sandys and Mr. Laurence Housman do something to retrieve the Meredithian Gallery; but, when one remembers that Rossetti and Whistler were both drawing for the wood-engravers at the period when

## PLAYHOUSES.

"LITTLE MISS LLEWELYN" AT THE VAUDEVILLE.

OF the triumph of the first venture in management made by Miss Hilda Trevelyan and Mr. Edmund Gwenn there can be no possibility of doubt: "Little Miss Llewelyn"—a version of Frantz Fonzon's and Fernand Wicheler's "Le Mariage de Mlle. Beulemans"—is a comedy which not only secured for its leading interpreters a first-night welcome of the most enthusiastic applause, but which, from the humanity of its story and from the wit and humour of its dialogue, seems bound to develop into a lasting success. All which should be very gratifying to lovers of good art, for Mr. Gwenn, as a character-actor of remarkable range who can also strike a sincere emotional note, and Miss Trevelyan, as the ideal interpreter of the unassertive, seemingly negligible, but rarely efficient little woman, are players whose unique talents have long entitled them to assume parts of more importance and of wider range than have hitherto fallen to their lot. The play in which these two artists make their managerial debut gives them ample opportunity for the display of their quality. The story of Mlle. Beulemans' engagement to Seraphin Meulemeester and eventual marriage to her father's Parisian clerk, of her endeavours to compose the unending squabbles between her parents, and of the success of her efforts towards making Seraphin regularise his union



Photo. Bert.  
TO APPEAR AT THE LONDON COLISEUM  
ON SEPTEMBER 18: MME. SARAH BERN-  
HARDT—AS QUEEN ELIZABETH.

APPEARING AT THE GLOBE THEATRE:  
MISS EDITH TALIAFERRO AS REBECCA,  
IN "REBECCA OF SUNNYBROOK FARM."

conceived and composed, and the chiaroscuro good; very difficult to judge how he will go on. So much discrepancy 'twixt execution and conception I have not yet seen—it is strange." Others were not exercised as to his execution, and by 1861 he was widely admired. Everybody, in those days, went to the Academy, and Rossetti, having paid his visit, wrote to Allingham: "The Academy is rather seedy, only has a refreshing look through being more fairly hung than usual. Leighton might, as you say, have made a burst had not his pictures been very ill-placed." Now, in 1861 Meredith and Rossetti were friends, and it is possible that Meredith, while "standing alone" in his admiration, was not unconscious of Rossetti's support.

"I quite agree with you in loathing *Once a Week*, illustrations and all" was the view Rossetti posted to Allingham at a time when Millais was illustrating Meredith's occasional verses in that publication. Leighton illustrated versions of Meredith's, and, even had he done so, he alone could not have saved the author



Photo. White.  
"REBECCA OF SUNNYBROOK FARM." AT THE GLOBE THEATRE: UNCLE JERRY TAKES  
THE YOUNG FOLK FOR A HOLIDAY.

"Rebecca of Sunnybrook Farm" is an adaptation of Mrs. Kate Douglas Wiggin's novel of the same name. The place is the State of Maine; the time, about 1880. Miss Edith Taliaferro is the Rebecca Rowena Randall.

they were most intimate with the busily scribbling novelist, it must be admitted his ill-luck was great. To turn the portfolio of illustrations issued with the Memorial Edition is to agree with Rossetti's loathing to the full. E. M.

Welsh comedy, plays delightfully a sort of wheedling counterpart of her many managing and mothering rôles; and Mr. Edmund Gwenn racyly interprets the explosive humours and engaging vanities of the heroine's warm-hearted and hot-tempered father.

[Other Playhouse Notes elsewhere in the Number.]



## AN ADVOCATE OF IMPERIAL CO-OPERATION: THE CANADIAN PREMIER.

PHOTOGRAPH BY F. A. SWAIN, 106, NEW BOND STREET, W.



**"THE SECURITY OF THE SEAS IS AS ESSENTIAL TO THE SAFETY OF THE EMPIRE AS THE DREATH OF LIFE IS TO THE INDIVIDUAL": THE RIGHT HON. ROBERT LAIRD BORDEN, K.C.**

Mr. Borden, before leaving England for Canada the other day, issued a farewell statement in which he said: "... Matters of considerable moment have been under consideration. The opportunities afforded to the Canadian Ministers of being present at meetings of the Imperial Defence Committee have been fruitful in valuable information. ... Amongst the most important objects of our visit was the desire to obtain information respecting the conditions of naval defence affecting the Empire. ... Especially have we been impressed by the keen interest of the British people in the progress, development, and influence of the Overseas Dominions. ..." When he received the Freedom of the City of Glasgow, Mr. Borden, after having referred to himself as "the great-grandson of a certain Robin

Laird, who ran away from Scotland about 150 years ago," said that the Canadians were not afraid of their responsibilities as one of the great nations within the great Empire; that he was glad to know that the idea of co-operation between the Mother-Island and the great Dominions over Seas had impressed itself very strongly upon the people of the British Isles; and that they of the Overseas Dominions were convinced that the way across the seas must be kept secure, that by no other means could the Empire be held together. "The security of the Seas," he said, "is as essential to the safety of the Empire as the breath of life is to the individual." Mr. Borden, who became Premier of Canada last year, was born at Grand Pré in 1854, was called to the Bar in 1878, and took silk in 1891.





MISS CLOTILDE GRAVES  
("RICHARD DEHAN").

Who made a great success with her novel, "The Dop Doctor," and whose new book, "Between Two Thieves," has just appeared.

Photograph by Samuel



In the Scriptorium

#### Cottage Furniture.

"Chats on Farmhouse and Cottage Furniture" is a book published by Mr. T. Fisher Unwin, in

their birth the genuine specimens of English country carpentry ere the dealers have swept the provinces bare.

The First Duke of Ormonde. Lady Burghclere is quite well aware that she ran the risk of being charged with supererogation and audacity when she set out to write a new "Life of James, First Duke of Ormonde" (Murray). Dr. Johnson desired an abridgement of the standard authority, Carte's "Life of Ormonde," such condensation to be confined to the limits of two duodecimo volumes.

a authorities, and finally, a plain, clear text, declare a method that lifts this book into the position of

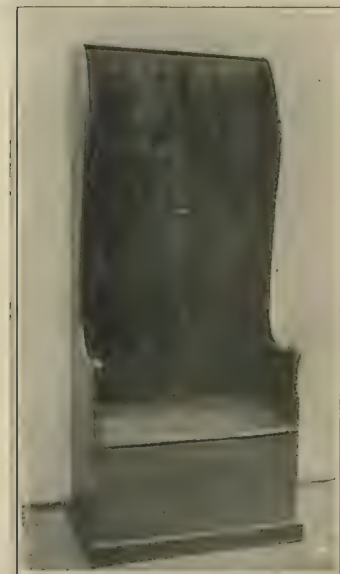
a serious contribution to history. The work has something of timeliness at a moment when the question of Irish government is so much before the public; but Lady Burghclere has not written in any journalistic spirit this biography of the man whom Charles II. called "the fittest person to govern Ireland." James Butler, twelfth Earl and first Duke of Ormonde, was born in 1610 at Clerkenwell. He was the son of Viscount Thurles, and grandson of the eleventh Earl of Ormonde. After a strange infancy, and a desultory education under the care, or neglect, of Abbot, Archbishop of Canterbury, he became, for a short time, a young man about town, who sought to employ his activities under Buckingham on the expedition to La Rochelle. Foiled in this hope, he retired to Ireland, and there, in 1633, found employment under Strafford. His loyalty to that luckless genius is one of the brightest points of Ormonde's



MR. GORDON INGLIS.

Whose new book, "Sport and Pastime in Australia," with a Preface by Sir George Reid, has been published by Messrs. Methuen.

Photograph by Elliott and Fry.

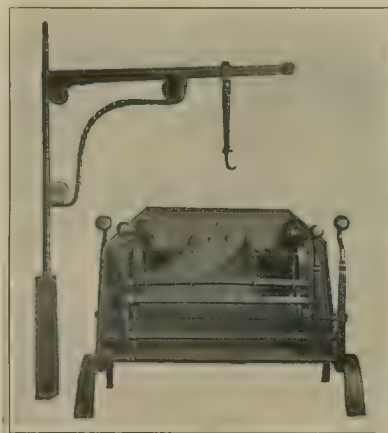


SEAT AND LARDER COMBINED: AN EARLY "GRANDFATHER" ARM-CHAIR AND BACON-CUPBOARD.

"The 'grandfather' chair... has a humble lineage.... The specimen we illustrate does duty as a bacon-cupboard as well as a chair. Usually such pieces have the cupboard opening at the back, but in this instance the cupboard opens in front."

From "Chats on Cottage and Farmhouse Furniture."

cottages have been raided by dealers in search of works by fashionable artists, but willing to buy the often elegant, if simple, products of the village carpenters, who, reckless of fashion, have perpetuated and developed, with individual modifications, types of chattels created for the use of folks who did not rank as the gentry. The amateur may learn much from the book—may discover that the dressers called "Welsh," as a rule, do not come from the country where the taste was for elaborate carving, but often from sturdy Lancashire, which aimed at beauty by simplicity, sense of proportion, and fineness of line; and that grandfather clocks must be approached as suspiciously as prospectuses. The book is written pleasantly and with an appreciation of the human and historical side of the subject; nevertheless, it contains the facts that the amateur collector needs, and the hints prized by him. One may well draw particular attention to Mr. Hayden's appeal to societies, local authorities, and wealthy folk to step in and secure for public exhibition in the land of



By Courtesy of Messrs. Phillips, Hitchin.

AN IMPLEMENT ASSOCIATED WITH LEARNING TO WRITE: A QUEEN ANNE POT-HANGER.

"The pot-book is of great antiquity, and belongs to days when man first learned to cook his food.... 'Pot-books and hangers' is an English phrase denoting the beginning of things academic."

#### "CHATS ON COTTAGE AND FARMHOUSE FURNITURE."

BY ARTHUR HAYDEN.

Illustrations Reproduced by Courtesy of the Publisher, Mr. T. Fisher Unwin.

Lady Burghclere has found that limit impossible to observe; for she has gone about her task in the true spirit of the modern historian. Documentary evidence, minute sifting of



A UNIQUE PIECE: A DRESSER AND "GRANDFATHER" CLOCK COMBINED, OF THE QUEEN ANNE PERIOD.

In the Collection of Mr. D. A. Bevan.

"In the centre of the dresser is a clock of the familiar grandfather form in miniature. This clock is not an addition to the dresser, but is a portion of the dresser and was made with it.... No later hand has tampered with this fine example, and it stands as... unique in its form."

From "Chats on Cottage and Farmhouse Furniture."



BEQUEATHED BY GOLDSMITH TO THE FOUNDER OF THE HUMANE SOCIETY: A CHAIR WITH TRANSVERSE RAILS.

"An historic example of the chair with transverse rails is that which was once in the possession of Oliver Goldsmith.... It was bequeathed by the poet to Dr. Hawes... founder of the Royal Humane Society.... It is preserved at the Bethnal Green Museum."

From "Chats on Cottage and Farmhouse Furniture."

character. He could not rescue his chief, but he used masterly tactics to secure legal delays in the hope of saving for England what Richelieu called her wisest head. The story of Ormonde's Irish administration and of his struggles with Cromwell is recounted without any attempt to enforce their intrinsically dramatic quality, but the plain documentary evidence is sometimes exciting enough. For the atrocities both sides had sufficient blame, but Ormonde was no party to these enormities; for he held it "base and unchristian" to make war on women and children. Lady Burghclere, though a strict historian, cannot always hide her humour, which looks out pleasantly in her account of Ormonde's scapegrace son John. Ormonde's fortunes during the Commonwealth, and his services to the later Stuarts, occupy the greater part of these two volumes, which afford an excellent, just, and temperate portrait of a man who was a pattern of loyalty. His work did not endure, but he gave Ireland a few years of good government.



# "SOLDIER, REST, THY WARFARE O'ER!" THE "GENERAL'S" FUNERAL.

PHOTOGRAPHS BY NEWSPAPER ILLUSTRATIONS; AND ILLUSTRATIONS BUREAU.



1. JUST AFTER RECEIVING THE SALUTE OF THE ACTING LORD MAYOR OF LONDON: THE CORTÈGE PASSING THE ROYAL EXCHANGE—WITH THE NEW "GENERAL" WALKING BEHIND.

Impressive in its simplicity, silence, and perfect order—a masterpiece of the Salvation Army's powers of organisation—the funeral procession of the late "General" Booth through the City on August 29 was one of the most moving ceremonies which even London has seen. Huge throngs lined the route, from Blackfriars Bridge to Abney Park Cemetery, five miles away, to pay a last tribute of respect to the great spiritual soldier who had "laid down his sword." The absence of gloomy signs of mourning was a marked feature of the proceedings. The bier was draped in crimson, and at each corner of the funeral

2. SPEAKING AMID SIGNS OF PROFOUND GRIEF: A COMMISSIONER ADDRESSING THE THRONG AT THE GRAVE AS REPRESENTATIVE OF THE SALVATION ARMY ABROAD.

car was the familiar "blood and fire" banner, while between the banners were bleached palms. The procession contained fifty-one brigades of the "Army," and the funeral car joined it after the forty-seventh brigade had passed the headquarters in Queen Victoria Street. Behind the car walked "General" Bramwell Booth and other members of the family. As they passed the Mansion House the cortège was saluted by the Acting Lord Mayor, Sir John Knill. Inset in the upper illustration is a photograph of the actual coffin, with the palms and flags which surrounded it.



## MIXED TRAVELLING: THE DIFFICULTIES OF AN AMERICAN "SLEEPER."

DRAWN BY OUR SPECIAL ARTIST, CYRUS CUNEO, R.O.I.



## AT THE HOUR OF MUCH EMBARRASSMENT: GETTING-UP TIME DURING A LENGTHY RAILWAY JOURNEY IN THE UNITED STATES.

Taking it all in all, it cannot be gainsaid that the American sleeping-car is very well and most ingeniously managed; but, equally, it cannot be denied that it is responsible for a good many moments of embarrassment: this chiefly by reason of the comparatively cramped space available. It is possible, of course, for the ladies in the car to go to their own "washing-room" and dress there, just as it is possible for the men to go to theirs; but it is a fact that as, with the perversity of human nature, everyone insists on getting up at the same time, only a small proportion of the passengers can use the special rooms unless they are willing to wait a very considerable number of minutes to take their turns.

Hence many attempts to dress while in the berth behind the curtain; feats which call for contortions and cannot be described as comfort-giving. In the ordinary "sleeper," the lower beds are made on the seats which are in use in the daytime; while the upper berths are lowered from the sides of the car, against which they pack flat when not in use. Bed-clothes, mattresses, and curtains are, of course, stowed out of sight during the day, all in the closed upper berths. The bed-making hour is not welcomed, for passengers must remove themselves and their belongings while the work is being done. Our artist illustrates the most awkward period of all—the hour of getting up.





(Photo, Lafayette)

AUTHOR OF "MATTER AND ENERGY,"  
IN THE HONOR UNIVERSITY LIBRARY.  
MR. FREDERICK SODDY, F.R.S.

Western civilisation depends at present upon coal. When that is exhausted what form or forms of natural energy shall we find to take its place? That question is discussed by Mr. Soddy.

## SCIENCE JOTTINGS.

### THE GIFT OF SLEEP.

THE consideration of what Shakespeare styled "the ape of death" will always possess for mankind a high degree of fascination.

Commonplace in one phase, sleep is a mystical thing in another. Dividing our realm of being, playing its essential part in restoring the wearied rhythm of Nature, our unconscious period really poses before us as an intimate part and parcel of the vitality we own. No less important are the disturbances of sleep as subjects for scientific study, if only by reason of the influence they may and do exert on the life of those who suffer from want of due repose.

To the scientist, the cause of sleep is a matter of paramount interest, for even to-day there is by no means complete agreement in the ranks of the learned with regard to the actual bodily mechanism through the operation of which sleep is induced. Scarcely a person will be found who does not illustrate some special peculiarity or other in the matter of his repose, so that the individual sleeper possesses a character which in many cases is peculiar and special to himself. Thus it is that we hear of those who can exist healthily on sleep of short duration, while others demand their full complement of repose, and others, again, can sleep at any time, and some poor unfortunates

psychology is apt to upset, or at least to alter, the more primitive sleep ways of the animal, the child, and the non-intellectual



BROKEN, BUT WITHOUT LOOSE, AND SO DANGEROUS.  
SPLINTERS: "TRIPLEX" GLASS SHATTERED BY A HEAVY METAL BALL.

It is clear that the gravity of many accidents due to the breaking of glass would be much diminished if the pieces of glass could be prevented from separating. Under ordinary circumstances, some fragments remain in their frame, and their sharp points and edges give rise to dangerous wounds. To obviate this, a glass has been contrived called "Triplex." This is manufactured as follows: Two glass plates are taken, and one face is coated with a light layer of gelatine; next, the two related plates are put against each other, and a very thin layer of celluloid is placed between; the whole is then put under the hydraulic press in order to obtain thorough welding. The mass of glass which emerges from the press is as transparent as ordinary glass.

person. To get rest and peace, Mr. Hall thinks and argues, is the great aim and end of all that he includes in what I may call his scheme of sleep-culture.

If there is much in the book too idealistic for the wholesale acceptance of the every-day,

practical worker, at the least our author very properly brings well to the front the magnificent virtue there lies in well-ordered sleep. The pity of it all is that the due ordering of our repose is

affords, after all, the very basis on which he would be wise to found his advice how to discover the perfect way of sleep.

The difficulty in all such writing, as that of the type in Mr. Hall's book is

that, with the best of intents, the advice given about sleep-culture is just the hardest to follow. It is easy to preach patience, to inculcate repose, to elevate the waiting spirit, and so, theoretically, to woo "Nature's sweet restorer," but there is not one amongst us who does not appreciate the difficulty of the initial problem how to secure the advent of our physiological unconsciousness. The weakness of Mr. Hall's arguments is seen when he generalises, for he thins out his contentions and advice into a diffuse state that ends in his cry for "peace," which is just the special gift and boon that the weary brain cannot obtain. What would probably have made the book more interesting to the general reader would have been a fuller account of sleep-theories, and a more up-to-date knowledge of the physiology of sleep, as taught in the medical schools of to-day. Many of Mr. Hall's authorities are decidedly ancient in a sense, and he attributes in at least one case to a Harvard authority a sleep theory of the "neuron," or nerve-cell, that rightfully dates from the researches of Ramon y Cajal himself. Apart from the defect already noticed—that in seeking to elucidate a scientific subject from the idealistic standpoint, our author seems

(Photo, Lafayette, Dublin)

SPEAKER ON THE ORIGIN OF LIFE:  
PROFESSOR SCHÄFER, PRESIDENT  
OF THE BRITISH ASSOCIATION.

This year's meeting of the British Association was due to begin at Dundee on September 4. Professor Schäfer, the famous Edinburgh physiologist, arranged that his presidential address should deal with the origin of life.



TWO SHEETS OF GLASS WITH A SHEET OF CELLULOID BETWEEN THEM:  
"TRIPLEX" STRUCK BY A HAMMER.

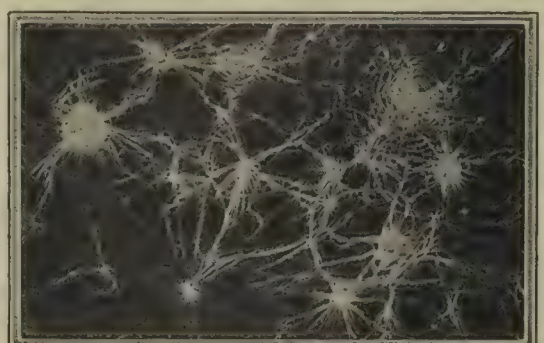
have a difficulty in sleeping at all. Among the holiday literature which has come in my way, a book by Bolton Hall, an American writer, entitled "The Gift of Sleep" (T. Fisher Unwin), has interested me not only because it deals with a topic which I have said is always fascinating, but by reason also of the somewhat quaint treatment it receives at the author's hands. The book is, in many places, didactic and idealistic; in others, Mr. Hall descends to the scientific phases of the subject, without reference to which, indeed, no volume on Sleep could be regarded as fulfilling a mission of instruction at all. Part of the argument of the work is that the sleep habit is modified powerfully by the degree of culture and education of the individual, which is perfectly true, no doubt, because the active and trained



THE SCIENTIFIC REARING OF PERIWINKLES: THE CROISIC PARK  
FOR THE BREEDING OF THE MOLLUSC.

At Croisic, for example, six acres devoted to the breeding of periwinkles supply nearly fifty tons of the molluscs a year. Hollow bricks are provided for the shell-fish, which thrive excellently with these as their homes; while others are kept on wooden stakes. Seaweed is their food.

precisely the difficult part of human duty in relation to our hours of rest. Science—for which Mr. Hall, by the way, has no very great sympathy—



AFTER FOURTEEN STONES HAD STRUCK IT: A PANE OF "TRIPLEX"  
GLASS BROKEN, BUT "WHOLE."

to regard scientific fact as the least important phase of the matter—Mr. Hall's book will form a pleasant companion for a quiet holiday hour or two. He is evidently a man of a high moral purpose and intent, anxious to promote in others the idea that the sleep-habit properly cultivated must lead to his ideal "peace," and, therefore, to the general betterment of man. He has, of course, high authority for maintaining the importance of his topic. But Science is his best friend in determining the great virtue of repose, and in demonstrating its necessity as the second side of the life we know; and equally, the benefits of all sleep-love, sacred and secular, can be summed up concisely and truly in the old familiar phrase, "He giveth his beloved sleep."



IN A PARK DEVOTED TO THE PERIWINKLE: THE GATHERING  
OF THE MOLLUSCS.

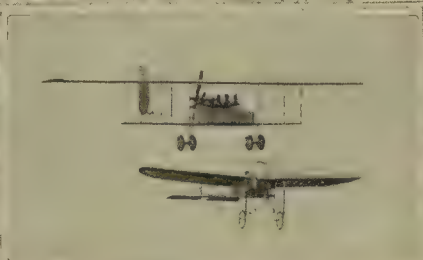
sacred and secular, can be summed up concisely and truly in the old familiar phrase, "He giveth his beloved sleep."



## FLYING NOT DANGEROUS! ARMIES OF LIVING; SQUADS OF LOST.



THE ARMIES OF THE LIVING; AND THE SQUADS OF THE LOST:  
THE WORLD'S AIRMEN; AND THOSE KILLED WHILE FLYING.



OF 167 FATAL ACCIDENTS UP TO JUNE 30,  
1912, 97 OCCURRED TO BIPLANES, 69 TO  
MONOPLANES, 1 TO A GLIDER.

A WRITER in "Je Sais Tout," asks whether flying on aeroplanes is dangerous, and answers "No." He shows that during the first half of 1912 French military airmen alone covered some 650,000 kilometres at a cost of 11 lives: an average of one flying-man killed for each once and a-half round the world. This, he argues, cannot be considered out of the common. The top illustration shows (in the background) the licensed airmen of the chief countries on March 31, 1912, and (in front) the airmen killed up to June 30. Between 1908 and that time France is shown with an army of 819, and with 53 dead; Germany with 135, and 33 dead; England with 196, and 12 dead; Belgium with 49, and 5 dead; Russia with 97, and 12 dead; Italy with 106, and 13 dead; Spain with 14, and 4 dead; Austria-Hungary with 48, and 3 dead; the United States with 43, and 28 dead; Holland with 19, and 1 dead; Switzerland with 21, and 3 dead.



DURING THE FIRST HALF OF 1912 FRENCH  
MILITARY AIRMEN FLEW 650,000 MILES AT  
A COST OF ELEVEN LIVES.



THE ARMY OF THE LOST: SOME VICTIMS OF AVIATION.

From September 17, 1908, when Lieutenant Selfridge, the American airman, lost his life, until this August, which saw the deaths of Mr. Lindsay Campbell, the Australian, Mr. Fenwick, the Englishman, Lieutenant Manzini (the only airman killed in action, who fell into the sea at Tripoli and was drowned), and the French Lieutenant Chandenier, no fewer than 175 people have fallen victims to flying. The last illustration on this page shows some of them. 1. Capt. Matsievitch (Rus.). 2. Lt. Monte (Ger.). 3. Ely (Am.). 4. Levasseur (Bel.). 5. Sainte-Croix Johnstone (Am.). 6. Lt. Boerner (Fr.). 7. Hoxey (Am.). 8. Paillole (Fr.). 9. Rodgers (Am.). 10. Van Maatsuyck (Holl.). 11. Fred Wagner (Ger.). 12. Parmelee (Am.). 13. Lt. Cammell (Eng.). 14. Jules Noël (Fr.). 15. Lemmling (Ger.). 16. Lt. Neumann (Ger.). 17. Lt. Selfridge (Am.). 18. Rols (Eng.). 19. Civio Cirra (Ital.). 20. Lt. Saglietti (Ital.). 21. Delagrèze (Fr.). 22. Leblon (Fr.). 23. Vallon (Fr.). 24. Lefebvre (Fr.). 25. Cromwell Dixon (Am.). 26. Chavez (Peruvian). 27. Ed. Nieuport (Fr.). 28. Comte de

Robillard (Fr.). 29. Verrept (Bel.). 30. Desparmet (Fr.). 31. Lecomte (Fr.). 32. Lt. Peignant (Fr.). 33. Capt. Jost (Fr.). 34. Picollo (Ital.). 35. Hauvette-Michelin (Fr.). 36. Lt. Boncourt (Fr.). 37. Capt. Dubois (Fr.). 38. Capt. Ferber (Fr.). 39. Mlle. Suzanne Bernard (Fr.). 40. Lafont (Fr.). 41. de Pola (Spain). 42. Cei (It.). 43. Poillot (Fr.). 44. Vivaldi Pasquas (It.). 45. Lt. Etienne (Fr.). 46. Grahame Gilmour (Eng.). 47. Blanchard (Fr.). 48. Frisbie (Eng.). 49. Mme. Denise Moore (Fr.). 50. Pielschker (Ger.). 51. Capt. Tarron (Fr.). 52. Lt. Bague (Fr.). 53. Lt. Princeteau (Fr.). 54. Wachter (Fr.). 55. Witte (Ger.). 56. Capt. Madiot (Fr.). 57. Robl (Ger.). 58. Grace (Eng.). 59. Lt. de Caumont (Fr.). 60. Lt. de Ville-d'Avray (Fr.). 61. Capt. Camène (Fr.). 62. Lt. Lanthésune (Fr.). 63. Johnstone (Am.). 64. Capt. Echelman (Fr.). 65. Landron (Fr.). 66. Maro (Fr.). 67. Cammaras (It.). 68. Ruchonnet (Suisse). 69. Marra (It.). 70. Kimmerling (Fr.). 71. Lt. Ducourneau (Fr.). 72. Dan-Kinet (Bel.). 73. Lemartin (Fr.). 74. Moisant (Am.). 75. Lt. de Grailly (Fr.). 76. Lt. Byasson (Fr.). 77. Miss Quimby (Am.).



# WATER AND LAND: NORWICH FLOODED AND NORMAL.

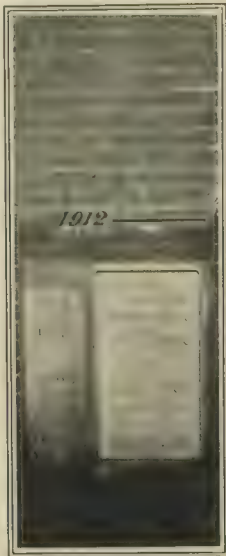
DIAGRAM OF THE RAINFALL BY MR. J. H. WILLIS, F.R.MET.SOC.; SIX PHOTOGRAPHS BY VANDYCK; ONE BY NEWS. ILLUS.



DURING THE FLOODS: WESTWICK STREET.



AFTER THE FLOODS: WESTWICK STREET.



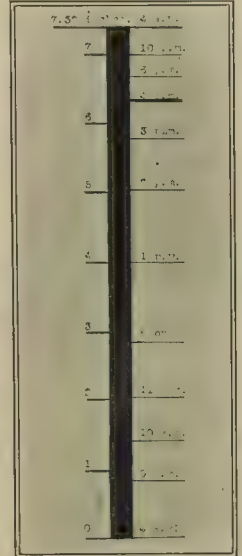
THE 1912 RECORD MARKED IN BLACK: FLOOD LEVELS REGISTERED AT NORWICH—FROM 1614.



DURING THE FLOODS: MAGDALEN STREET—WITH THE WATER INCHES DEEP.



AFTER THE FLOODS: MAGDALEN STREET—WHEN THE WATER HAD SUBSIDED.



7.52 INCHES FROM 4 A.M. TO 4 A.M.: THE REMARKABLE RAINFALL AT NORWICH ON AUGUST 26-27.



DURING THE FLOODS: A NORWICH STREET.



AFTER THE FLOODS: A NORWICH STREET.

The state of affairs in Norwich during the great floods of August was not helped by the facts that the city was unapproachable for a while by train, and that telegraph, telephone, and electric-light failed. It was not very long before the flood subsided, but by that time an

enormous amount of damage had been done, and a number of people, estimated at between eight and ten thousand, were homeless. At the end of last week the relief fund had reached a total of some £5000; to this the King and Queen subscribed £100 and £50 respectively.



## NORWICH THE ISLAND: DURING AND AFTER THE FLOODS.

FIVE PHOTOGRAPHS BY VANDYCK; ONE BY NEWS. ILLUS.



DURING THE FLOODS: PULL'S FERRY AND THE FERRYMAN'S COTTAGE.



AFTER THE FLOODS: PULL'S FERRY AND THE FERRYMAN'S COTTAGE.



DURING THE FLOODS: TROWSE CHURCH.



AFTER THE FLOODS: TROWSE CHURCH.



DURING THE FLOODS: A POLICE-BOAT IN A NORWICH STREET.



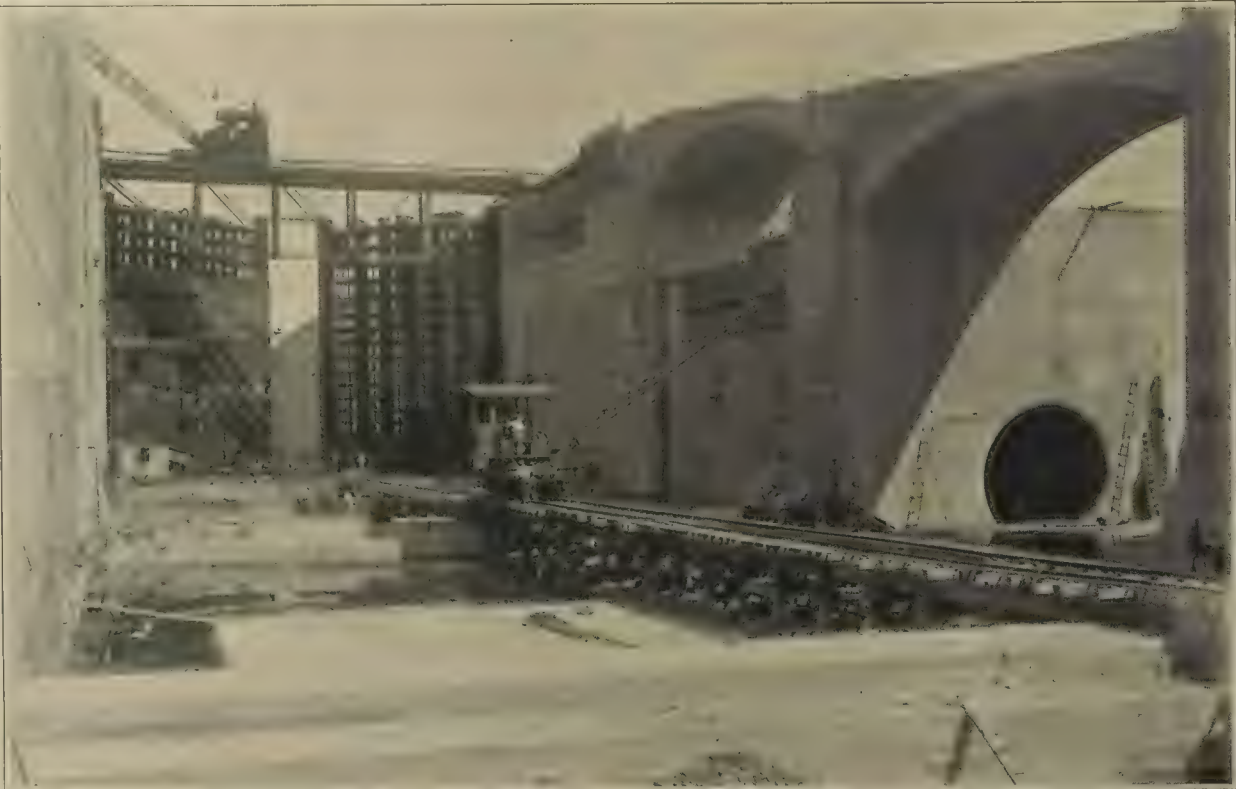
AFTER THE FLOODS: THE SAME NORWICH STREET IN NORMAL CONDITION.

It seems a little late nowadays to discuss in any great detail the remarkable flooding of Norwich, which, owing to a rainfall of almost unprecedented heaviness, became for a while an island in the strictest sense of the term, in that it was a piece of land entirely surrounded by water,

and, moreover, was a particularly damp island at that. But it is good to note contrasts—places in the city during the disaster, and those same places immediately after the waters had subsided. When the water was at its deepest in the streets many remarkable scenes were witnessed,



# THE ANGLO-AMERICAN DISPUTE: THE PANAMA CANAL IN THE MAKING.



1. A BIRD'S-EYE VIEW FROM THE LOWER LOCKS, SHOWING THE CONSTRUCTION OF LIFT SILLS AND EAST WALL IN THE FOREGROUND; THE MIRAFLORES UPPER LOCKS.

2. SHOWING THE OUTLET IN THE EAST WALL AND THE CONSTRUCTION OF THE LOWER MAIN GATES: THE EAST CHAMBER OF THE PEDRO MIGUEL LOCKS. LOOKING NORTH.

The attitude of the United States with regard to the Panama Canal has brought forth many protests against America's decision to give preferential terms to certain of its shipping. The chief of these comes from Great Britain, whose Government regards the action of President Taft and his advisers as a direct violation of the Hay-Pauncefote Treaty. This has been backed up not only by influential newspapers in Germany, France, Austria, and elsewhere, but by certain of those of the United States itself. That well-known and old-established

journal, the "Argonaut," of San Francisco, is particularly outspoken. In the course of a lengthy article it says: "It will be seen that the Hay-Pauncefote Treaty is a full and frank admission of the new American rights over the canal, rights that did not previously exist and that were explicitly denied by the earlier agreement. In return for this admission Great Britain received the guarantees of 'entire equality,' and if we are now to assert that these guarantees have no practical value we are in the position of receiving something

[Continued opposite.]



# "GOODS" DELIVERED; BUT NOT TO BE PAID FOR? THE PANAMA CANAL.



1. LOOKING NORTH, FROM THE MIDDLE LOCKS: THE GATUN LOWER LOCKS.

2. SHOWING THE EAST CHAMBER FOREBAY AND CONSTRUCTION OF THE APPROACH WALL: THE UPPER GUARD GATES OF THE PEDRO MIGUEL LOCKS, LOOKING NORTH.

*Continued.*

for nothing and of benefiting from one side of a bargain while refusing to fulfil the other. In fact, we are offering a price and then snatching it back as soon as the goods have been delivered. That the canal has now become American soil has no bearing upon the case unless upon the contention that one iniquity justifies another. . . . The dispute is a peculiarly unfortunate one at the present time. Not only does it come as a sequel to our disreputable seizure of the Panama Isthmus, but it coincides with a domestic political situation by no

means free from charges of bad faith and of trickery. This is not a question of seeming self-interest in the matter of American ships. It is a question of international rectitude, of the plain meaning of a formal obligation, of the binding force of a treaty with a friendly nation." It is anticipated that the canal will be in a condition to pass shipping by September of next year, so that the fullest test can be made before the formal opening, in 1914. It is to be hoped that long before that the United States will reconsider its unpopular decision.



## LADIES' PAGE.

A CLUB has been founded in Paris to which only well-known gourmets who have also toured not less than 40,000 miles by motor-car may be elected. They are pledged to inform one another of the good inns that they discover, those where a dinner fit to eat is to be had, even though the fare be modest in price and kind. The "Club Maxims" include one that "a hotel is not to be recommended where luxurious appointments are combined with an indifferent *cuisine*: We eat beefsteaks and not Louis the Fifteenth furniture." They patriotically declare: "There is no good cooking but the good old style of French cooking," and then comes the wise observation, "The good old French cooking can only be done with fresh ingredients—fresh eggs, fresh butter, fresh milk, fresh vegetables." There are in England both well-to-do private kitchens and quite pretentious hotels at which "cooking butter," "cooking eggs," tinned vegetables, and cold meats reshaped and absurdly dignified with the name of *entrées*, are habitually used. This is never the way to produce a good and wholesome table. Sometimes, the "poverty, but not the will, consents" to such shifts; and indeed, for some purposes, such as frying, the best butter is only wasted; but it is far wiser and more satisfactory to have an altogether more simple scheme of dinners when expense is an object, in order to be able to use fresh and genuine articles of diet, than to put forward a pretentious menu based on tinned and medicated foods.

One of the signs and tokens of the far greater artistry of the French about the table is the excellence of the dinners to be had in quite unpretentious country hotels in their happy land, as compared with the abominable meals so generally served in England in all but the most expensive restaurants, and too often even in high-priced ones likewise. In some overcrowded Riviera hotels in full season the dinners are often commonplace, the same sort of thing that is served everywhere to passing travellers—from London via Cairo to New York. The true French *cuisine* is to be fairly sampled in the hotels in the smaller towns more or less off the crowded routes. In Provence, especially, there are many hotels at which a good dinner is sure to be found ready because of a sensible French custom: many residents, instead of keeping a cook themselves, go to the hotels regularly to dinner, at subscription rates, perhaps of even less than three or four shillings per dinner; and so delicious, varied, and liberal often is the table that it is almost worth while to stop in the town to partake of its meals. Of course, there is a pronounced flavour of garlic in the made dishes; while in England, though there may be a French or Italian chef at work, he has it impressed upon him that he must not put a scrap of garlic even into the *plats* that most demand its exhilarating zest. Garlic is used all over France, but not so liberally elsewhere as in Provence. However, the reputation of the Provençal cooks as the best to be



AN EARLY AUTUMN TAILOR-MADE.

The basque coat has an easy cut, the very wide revers of white cloth, embroidered, giving a collar-like effect, with cuffs and tab pockets to match.

found in France dates back to the days of the Grand Monarque, the palmy days of French cookery.

In England, having excellent things to cook, we are too prejudiced and limited about our table. In a clever little cookery book for English use, by a French authoress, she constantly advises the employment of a slight suspicion of garlic, but she invariably adds, with all the emphasis of italics—"But don't tell anybody!" This sly hint is, believe me, a valuable one! The Englishman in Provence always eats his garlic-touched viands with gusto. I have never forgotten a guest of mine who by some unfortunate chance was led to remark before luncheon that she detested garlic, and never ate anything flavoured with it, when I had ordered a delicious soup, "Potage Périgord," which is composed of a clear meat stock wherein tomatoes and garlic and mace have been boiled till they have yielded up all their savour, and then been strained out, the product nicely thickened up with egg-yokes and baked flour, and then prettily coloured pink with a few drops of cochineal. My garlic-hating friend, having consumed the small portion that I sent her—very little, because I looked to see her leave it—actually begged pardon for her breach of etiquette, but might she have another help of that delicious soup? A tiny scrap of garlic in stews and soups, either boiled whole and removed, or chopped excessively finely and left in, will often bring a similar compliment—"but don't tell anyone," and use it *very* sparingly. Olive oil, as a frying medium, again, so much used in France, is abjured in England, yet it is often the best medium, and will not be objected to, because not detected, if quietly employed.

Other causes have helped the sewing-machine to produce underclothing so well made and cheap that to stitch it for ourselves is needless, unless we fancy to do it for a recreation. The ease of communication in modern times allows the needlework to be done where labour is plentiful and the product to be dispatched to where it is needed for the convenience of purchasers. I have been led to reflect upon the great change made in the modern woman's position by this one cause by looking over an interesting new catalogue issued by Messrs. Robinson and Cleaver, a copy of which can be obtained gratis by post by any of my readers who write and ask for it, addressing to that well-known firm, 40p, Donegall Place, Belfast. This catalogue is filled with illustrations of all kinds of underclothing for ladies, babies, or older children, and in Irish linen, in longcloth, in cambric, in nainsook, in flannel, delaine, and wincey; the designs are good and varied, and the prices are really so wonderfully inexpensive that it would be absurd to do the work at home. Some of the articles are made by the lockstitch sewing-machine, while others are all hand-sewn, the product of the clever fingers of the Ulster peasant women, to whom the material, ready cut-out, is distributed by Messrs. Robinson and Cleaver for making up. A useful feature is the list of trousseaux and of layette articles complete, and also outfits for India or the Colonies, at fixed prices for the various sets as selected. FILOMENA.

RECOVERY OF FASHIONABLE SLIMNESS.  
THE SPLENDID ANTIPON TREATMENT.

AT all fashionable functions, such as the recent Ascot Meeting, beautiful women, beautifully attired, have graced the surroundings, the most admired being those who have cultivated the slim and graceful English figure which makes the present fashions perfectly delightful to contemplate. For there is an English figure, slender and willowy—the very perfection of suppleness and grace—the envy of the women of other lands.

A slight over-fullness mars it, of course; but that can be easily corrected, as we shall show.

Even those who may be called stout have now no reason to despair of

recovering the fashionable slimness that is so charming; thousands of women who have taken a short course of the splendid Antipon treatment have proved this to their entire satisfaction, and have never felt better in health in their lives. The majority of those who have written to thank the proprietors of Antipon have reduced their weight by from fifteen to thirty pounds, and have regained the youthful beauty of form for which they were admired.

Most of these ladies, in their great gratitude, are warm in the recommendation of Antipon to their stoutish friends, and the proprietors of Antipon, in their turn, are grateful for these good offices.

For example, a lady writing from Devizes says: "I have much pleasure in stating that the friend for whom I obtained Antipon is now quite reduced to her normal weight, and is so bright and well in health—in fact, quite a different creature since taking Antipon. She can now take long walks without the slightest fatigue, and feels she cannot speak too highly of Antipon."

Another instance. A lady residing at Ecclestone, Staffs., writes: "Will you please send me a 4s. 6d. bottle by return of post? I want it for a friend of mine who has tried several remedies without the least benefit, so I am going to give her a bottle of Antipon, as she won't believe there is anything that will reduce her weight. Having had some myself years ago, and having had no return of over-stoutness since, I am quite sure that Antipon will do my friend a world of good, the same as it did for me."

The originals of the foregoing letters, together with hundreds of others, are filed for reference at the offices of the Antipon Company.

Except in very pronounced obesity there is no need for a protracted course of the Antipon treatment. In some cases, where there is merely a slight overfulness about the waist and hips, one or two bottles of Antipon prove sufficient to effect the necessary correction of "line," as in the following instance: we quote from the letter received by the Antipon Company from a lady residing at Catford, Kent. She writes: "I am pleased to say that one bottle of Antipon has worked such wonders in my case that I shall



"Stepping Stones to Slender Beauty."

not require any more. I have been waiting to see if it was really a permanent cure, and am glad to say it is."

One of the most provoking features in over-fatness is the double chin; another the bagginess about the cheeks, especially under the eyes. Antipon is excellent for correcting these faults, and this it does with great benefit to the skin, upon which it acts tonically from within, bracing up the cuticle, preventing wrinkles, and greatly improving the complexion. Those misguided persons who try to cure such defects by a starvation treatment are liable to be puckered and wrinkled about the face. Antipon prevents any sort of flaccidity, however much disfiguring excess fat is taken away. To undergo a course of Antipon is to look and feel quite young again.

There is a decrease of from 8 oz. to 3 lb. within a day and a night of starting Antipon; the amount of reduction,

of course, depends on the degree of obesity. With the recovery of normal weight and slender shapeliness the doses may cease, Antipon having overcome the tendency to put on flesh to excess.

Antipon revives the appetite and stimulates the digestive powers.

## Enquiries Dealt With.

Those who are desirous of obtaining particulars about the Antipon treatment other than those given in the usual announcements of the Press should write to the Enquiries Department, The Antipon Co., Olmar Street, London, S.E., by whom all such communications are regarded as strictly private and confidential, and entail no fee or charge of any kind.

"VISITOR."—(i.) Your mature age will make no difference; you will find a short course of Antipon the ideal remedy, as it will help to restore the tone and strength you have lost with your increasing corpulency, (ii.) You should not continue the spare diet; it is quite unnecessary and, indeed, the cause of further bodily weakness.

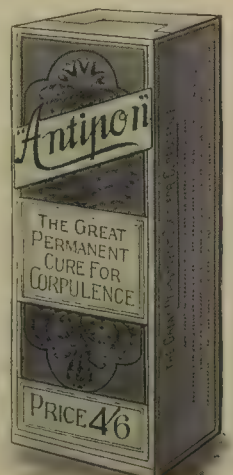
S. M. M. (Pudsey).—Yes, most fat people are inclined to digestive and stomachic troubles, but with the rapid reduction of weight under the pleasant Antipon treatment these complaints give no further trouble. Antipon has a splendid tonic action on the digestive system.

"IVOR."—You must remember that Antipon removes the cause of overfatness as well as the masses of superfluous fat under the skin and in the interior. That is why so many wonderful permanent cures have been effected by the Antipon treatment, even when the obesity has been a long-standing affliction.

Antipon is a refreshingly tart liquid, containing valuable vegetable substances only, and is completely harmless.

Antipon is sold in bottles price 2s. 6d. and 4s. 6d., by chemists, stores, &c.; or, in the event of difficulty, may be had (on remitting amount), privately packed, carriage paid in the United Kingdom, direct from the Antipon Company, Olmar Street, London, S.E.

Antipon can be had from stock or on order from all Druggists and Stores in the Colonies and India, and is stocked by wholesale houses throughout the world. United States Agents, Messrs. E. Fougere & Co., 90, Beekman Street, New York City.





**TESTIMONY FROM OVER SEAS**

All these are portraits of children fed on the "Allenburys" Foods.

Gratifying evidence as to their value is constantly coming to hand from all parts of the world.

Such testimony is received, not only from parents, but also from an ever increasing number of members of the Medical and Nursing Professions.

**MILK FOOD No. 1**  
From birth to 3 months.

**MILK FOOD No. 2**  
From 3 to 6 months.

**MALTED FOOD No. 3**  
From 6 months.

Pamphlet, "Infant Feeding and Management" sent free.

**Allen & Hanburys Ltd.,**  
LOMBARD STREET,  
LONDON.

**Locations of children in portraits:**  
 - HONG KONG, CHINA.  
 - CALCUTTA, INDIA.  
 - ST. PETERSBURG, RUSSIA.  
 - TRANSVAAL, SOUTH AFRICA.  
 - NATAL, SOUTH AFRICA.  
 - IDAHO, UNITED STATES.  
 - CAIRO, EGYPT.  
 - MONTERRAT, WEST INDIES.  
 - WESTERN AUSTRALIA.  
 - SYDNEY, NEW SOUTH WALES.  
 - GIBRALTAR, SPAIN.  
 - ONTARIO, CANADA.  
 - WELLINGTON, NEW ZEALAND.  
 - NIGEL, SOUTH AFRICA.

# The Allenburys' Foods



## MUSIC.

IN this quiet season when the flame of musical interest burns brightly only at the Queen's Hall and in the remoter world of provincial Festivals, the strange case of Mr. Hammerstein is still a theme of discussion. For some time he was in the state of mind of that Mrs. Henry Hawkins immortalised by Mr. Chevalier—

"First he said he couldn't, then he said he wouldn't, Then he murmured, 'Well, I'll see.'"

Finally, with clear vision reinforced by the long Atlantic distances, he has decided that he will see no more operatic ventures to their doleful end in this benighted country. He is hardly to blame. When he gave us the operas of our forefathers, we found them too old, and when he gave us the operas of to-day, we found them too new. His stars shone but fitfully, and the great heart of the public mourned to see so fine a building as the London Opera House standing out of the circuit of music-halls.

On the opening night of his unfortunate venture, when the Roman soldiers of "Quo Vadis?" were advancing their standards with the S.P.Q.R. upon them, a wag whispered that the letters foretold a Small Profit and a Quick Return.

And the wag was right. But before the end came there was an attempt to gather support for opera on semi-national lines, aided by a substantial subsidy from the authorities, and for a time it seemed as though the attempt would succeed. Private support was not lacking. However, the scheme was abandoned, and it is unnecessary now to refer to the details, as they are hardly likely to be revived.

The Promenade Concerts are attracting the usual measure of interest, and on one or two occasions it has been found impossible to maintain the rule that forbids repetitions. In honour of the memory of the late "General" Booth, Chopin's Funeral March was given on the night of Aug. 29, when a remarkable novelty found place in the programme. This was the Prelude and the Serenade from a pantomime ballet, "The Snowman," written four years ago by Erich Korngold, the young Austrian composer, when he was eleven years old! That the work should have taken a place in the concert of the evening,

significance and potentialities may perhaps be doubted; but the mere fact that they can be used without confusion, and even with confidence, by a lad of eleven is a thing that gives one "furiously to think." There is nothing remarkable about the thematic material in this case; it is the modern expression of the thought rather than the thought itself that impresses. While it would be possible to pass over the work as a very clever schoolman's effort if it came from the pen of a matured composer, it is impossible to consider it in this fashion under the circumstances. Clearly,

if Erich Korngold be allowed to grow, and is not doomed to the forcing-house of ambitious composition before he is old enough to enter it, he should have a great future. His existence, musically considered, is an enigma, one of the many that music provides, no other art being so prolific in this regard. Where music is concerned the dreams of our philosophy are comparatively tame affairs.

The attendance at the Promenade Concerts has been very large, and the weather would seem to have had a stimulating effect upon the Queen's Hall Orchestra and its conductor, many of the most famous works in the repertoire having been given with a care and attention to detail and a general

brilliance of effect that have seldom been equalled and never perhaps excelled. With a few exceptions the soloists have been rather above the average, and those music-lovers who preferred to postpone their holiday rather than face the last weeks of August away from home have found no small measure of compensation in the company of Sir Henry Wood and his talented colleagues.



Photo. C.N.

STARTING TO FLY 100 MILES OR MORE TO THEIR HOMES, SOME OF THE 30,000 HOMING PIGEONS RELEASED AT THE CRYSTAL PALACE FOR THE CHAMPIONSHIP RACE.

Over thirty thousand homing pigeons competed in the annual championship race, the start of which took place on the Terrace at the Crystal Palace on August 31. None of the birds had less than 100 miles, and some had 200 or 300, to fly to their homes. Each bird has a private number stamped on its wing. Its arrival is announced by the owner telegraphing this number, the time of handing in the telegram being taken as the time of the bird reaching home. The "air-line" distance flown is calculated, and the prizes go to the birds flying the most yards to the minute.

without a suggestion of incongruity, is sufficient tribute when we recall the programme. The exquisite Dream Music from "Hansel and Gretel" was there; Stanford's "Irish Rhapsody," Dr. Walford Davies's "Solemn Melody" (which was encored), and Saint-Saëns's "Suite Algérienne" were among the other important items. "The Snowman" music uses all manner of modern ideas and methods, whether with full appreciation of their

## Mr. MURRAY'S STANDARD WORKS.

## AUSTIN, JOHN.

LECTURES ON JURISPRUDENCE. Edited by ROBERT CAMPBELL. 2 Vols. 10s. each.  
STUDENT'S EDITION OF AUSTIN'S JURISPRUDENCE. Compiled by ROBERT CAMPBELL. 12s.  
ANALYSIS OF AUSTIN'S JURISPRUDENCE. By GORDON CAMPBELL. 6s.  
THE AUSTINIAN THEORY OF LAW. With Critical Notes and Excursus by Professor W. JETHRO BROWN. 10s. 6d. net.

## BISHOP, Mrs. (Isabella L. Bird).

HAWAIIAN ARCHIPELAGO; or, SIX MONTHS AMONG THE SANDWICH ISLANDS. Illustrated. 2s. 6d. net.  
KOREA AND HER NEIGHBOURS. Illustrated. 5s. net.  
A LADY'S LIFE IN THE ROCKY MOUNTAINS. Illustrated. 7s. 6d.; also 1s. net.  
UNBEATEN TRACKS IN JAPAN. 2s. 6d. net and 1s. net.  
LIFE OF MRS. BISHOP. By MISS ANNA M. STODDART. 6s. net.

## BORROW, GEORGE.

Illustrated. 6s.; 2s. 6d. net; 2s. net; 1s. net.  
BIBLE IN SPAIN; LAVENGRO. GIPSIES OF SPAIN  
WILD WALES. ROMANY RYE. ROMANO LAVO LIL.  
LIFE OF GEORGE BORROW. By HERBERT JENKINS. 10s. 6d. net.

## BYRON, LORD.

THE WORKS OF. New Text, with many hitherto Unpublished additions. Edited by E. H. COLERIDGE and ROWLAND E. PROTHERO. M.V.O. Portraits and Illustrations. 13 Vols. 6s. each.  
DON JUAN. Complete in 1 Vol. With 4 Photogravures. 6s.  
POETICAL WORKS. 1 Vol. Portrait. 6s. net.  
LIFE, LETTERS AND JOURNALS. By THOMAS MOORE. Portraits. 7s. 6d.  
BYRON: THE LAST PHASE. By RICHARD EDGECUMBE. 10s. 6d. net.

## CRIPPS, WILFRED.

OLD ENGLISH PLATE. With numerous Illustrations. 21s. net.  
THE PLATE COLLECTOR'S GUIDE. Arranged by PERCY MACQUOID. Numerous Illustrations. 6s. net.

## CROWE AND CAVALCASELLE, G.B.

HISTORY OF PAINTING in Italy, Umbria, Florence, and Siena, from the 2nd to the 16th Century. A New Edition with Editorial Notes by LANGTON DOUGLAS, with upwards of 200 Illustrations. 6 Vols. £1 1s. net, each.  
Vols. I.—IV. Now Ready.

## ELPHINSTONE, Hon. M.

HISTORY OF INDIA—The Hindu and Mahometan Periods. 15s. net.

## FERGUSON, JAMES.

HISTORY OF ARCHITECTURE IN ALL COUNTRIES FROM THE EARLIEST TIMES: With numerous Illustrations.  
Ancient and Medieval, 2 Vols. 36s. net. Indian and Eastern, New Edition, 2 Vols. 42s. net. Modern, 2 Vols. 28s. net.

Volumes marked \* may be had on special terms. Applications should be made to your Bookseller, from whom all particulars may be obtained.

JOHN MURRAY, ALBEMARLE STREET, LONDON, W.

## DARWIN, CHARLES.

Uniform Cheaper Edition. 2s. 6d. net each.  
THE ORIGIN OF SPECIES. FERTILIZATION OF ORCHIDS.  
THE DESCENT OF MAN. EXPRESSIONS OF THE EMOTIONS.  
JOURNAL OF A NATURALIST. VARIATION OF ANIMALS & PLANTS. 2 vols.  
FORMATION OF VEGETABLE MOULD. LIFE OF CHARLES DARWIN. By his Son.  
MOVEMENTS AND HABITS OF CLIMBING PLANTS.  
INSECTIVOROUS PLANTS.

CROSS AND SELF-FERTILIZATION IN THE VEGETABLE KINGDOM. 9s.  
DIFFERENT FORMS OF FLOWERS. 7s. 6d.

## GIBBON, EDWARD.

\*DECLINE AND FALL OF THE ROMAN EMPIRE. Edited with Notes by MILMAN, GÜIZOT, and SIR WM. SMITH. Maps. 8 Vols. 7s. 6d. each.

## GOLDSMITH, OLIVER.

\*WORKS OF. Edited with Notes by PETER CUNNINGHAM. 4 Vols. 7s. 6d. each.

## GROTE, GEORGE.

\*HISTORY OF GREECE. Illustrated. 10 Vols. 5s. each.

## HALLAM, HENRY.

CONSTITUTIONAL HISTORY OF ENGLAND. Library Edition, 3 Vols., 30s.—Cabinet Edition, 3 Vols., 12s.—Student's Edition, 7s. 6d.  
EUROPE DURING THE MIDDLE AGES. Cabinet Edition, 3 Vols., 12s.—Student's Edition, 7s. 6d.  
LITERARY HISTORY OF EUROPE. Library Edition, 3 Vols.—30s.—Cabinet Edition, 4 Vols., 16s.

## HANDBOOKS.

INDIA, BURMA, AND CEYLON. Maps and Plans. 20s.  
JAPAN. Maps and Plans. 20s.

## MAINE, Sir HENRY S.

ANCIENT LAW. With Introduction and Notes by Sir FREDERICK POLLOCK, Bart. 5s. net.  
ANCIENT LAW, 2s. 6d. net. NOTES, Separate, 2s. 6d. net.  
VILLAGE COMMUNITIES. 9s.  
POPULAR GOVERNMENTS. 2s. 6d. net.  
EARLY HISTORY OF INTERNATIONAL LAW. 7s. 6d.  
EARLY LAW AND CUSTOM. 9s.

## MARCO POLO.

THE BOOK OF SER MARCO POLO, the Venetian. Sir Henry Yule's Translation, revised by Professor HENRI CORDIER. Illustrated. 2 Vols. £3 3s. net.

## MEDICI.

THE MEDICI. By Col. G. F. YOUNG, C. B. Illustrated. 2 Vols. 36s. net.

## MILMAN, DEAN.

\*EARLY CHRISTIANITY. 3 Vols. 4s. each.  
\*LATIN CHRISTIANITY. 9 Vols. 4s. each.

## MOTLEY, JOHN LOTHROP.

HISTORY OF THE UNITED NETHERLANDS. 4 Vols. 6s. each.  
\*JOHN OF BARNEVELD. Illustrated. 2 Vols. 12s. Also Library Edition. 2 Vols. 10s. 6d. net each.  
\*RISE OF THE DUTCH REPUBLIC. Illustrated. Library Edition. 3 Vols. 10s. 6d. net each.

## POPE, ALEXANDER.

\*LIFE AND WORKS OF. Introduction and Notes by J. W. CROKER, REV. W. ELWIN, and W. J. COURTHOPE. 10 Vols. 10s. 6d. each.

## ROBERTSON, CANON.

\*HISTORY OF THE CHRISTIAN CHURCH. 8 Vols. 6s. each.

## SMITH, SIR WM.

\*DICTIONARY OF THE BIBLE. With Illustrations. 3 Vols. £4 4s. Smaller edition. 1 Vol. 2s. 6d. net.  
\*DICTIONARY OF CHRISTIAN ANTIQUITIES. Illustrated. 2 Vols. £3 13s. 6d.  
DICTIONARY OF GREEK AND ROMAN ANTIQUITIES. With 900 Illustrations. 2 Vols. 8vo. 31s. 6d. each. Also 1 Vol. 21s. and 7s. 6d.  
CLASSICAL DICTIONARY OF BIOGRAPHY, MYTHOLOGY, AND GEOGRAPHY. With over 800 Woodcuts. 18s. Also 7s. 6d.  
COMPLETE LATIN-ENGLISH DICTIONARY. Medium 8vo. 16s. Smaller edition. 7s. 6d.  
COPIOUS AND CRITICAL ENGLISH-LATIN DICTIONARY. 16s. Smaller edition. 7s. 6d.

## SMILES, SAMUEL.

Uniform Edition. 3s. 6d. each.  
SELF-HELP. THRIFT. CHARACTER. DUTY. Also 2s. net and 1s. net.  
INDUSTRIAL BIOGRAPHY. JAMES NASMYTH: ENGINEER. (Also 1s. net.)  
LIFE & LABOUR. 1s. net. JASMIN: BARBER, POET, PHILANTHROPIST.  
MEN OF INVENTION AND INDUSTRY. BOY'S VOYAGE ROUND THE WORLD.  
SCOTCH NATURALIST, THOS. EDWARD. ROBERT DICK: GEOLOGIST AND BOTANIST.  
JOSHIAH WEDGWOOD: THE ARTISTIC POTTER. THE HUGUENOTS.  
\*LIVES OF THE ENGINEERS. 3s. 6d. each.  
AUTOBIOGRAPHY OF SAMUEL SMILES. 2 Photogravure Portraits. 15s. net.


## WALTERS, HENRY B.

A HISTORY OF ANCIENT POTTERY. Based on Samuel Birch's famous work. Numerous Illustrations. 2 Vols. £3 3s. net.

## YULE, COLONEL SIR H., AND BURNELL, ARTHUR COKE.

HOBSON-JOBSON. Being a Glossary of Anglo-Indian Colloquial Words and Phrases. Thoroughly revised by WILLIAM CROKER. 28s. net.





**Wolfe's Schnapps**

WOLFE'S SCHNAPPS is universally recognised as the great domestic emergency beverage, the medicinal "Nip-in-need" so to speak, the drink that pleases the palate and cures functional disorders, restoring the organic balance, so essential to perfect health, and the full enjoyment of life. Wolfe's Schnapps is equally beneficial to man and woman, and suits all climes and conditions of living.

Unlike ordinary Hollands Gin, WOLFE'S SCHNAPPS is a refined beverage, with a unique flavour and pleasant aroma, and its sphere of utility is unlimited.

*Wholesale Agents for United Kingdom, East Indies and Ceylon:*  
**The Finsbury Distillery Co., Ltd., London, E.C.**

For AUSTRALIA: M. Moss & Co., Sydney and Melbourne. For CANADA: Rose & Brooks Co. Ltd., 504, Westminter Avenue, Vancouver, B.C.; L. Chaput et Cie., Ltd., Montreal; George J. Eoy, Ltd., Toronto; The Hudson Bay Co., Winnipeg. For SOUTH AFRICA: Rolfe, Nebel & Co., Port Elizabeth, and E. K. Green & Co., Cape Town. For INDIA: C. F. Kellner & Co., Calcutta; Oakes & Co., Ltd., Madras; Nusservanjee & Co., Karachi and Lahore; Herbert Son & Co., Bombay. For MEXICO: M. Zapata, M. Merida, Yucatan. For CUBA: Michaelson & Prasse, Otrapias, 18, Havana. For ARGENTINE: J. F. Macadam & Co., Buenos Aires. For the FEDERATED MALAY STATES and STRAITS SETTLEMENTS: Messrs. A. C. Harper & Co., Kuala Lumpur. For BURMA: Messrs. A. Scott & Co., Rangoon. For CHINA: MacEwen, Frickel & Co., Hong Kong, Canton, Macao, Swatow and Amoy; Andrews von Fischler & George, Ltd., 1, Foochow Road, Shanghai.

(UDOLPHO WOLFE Co., New York.)

## Player's Navy Cut Cigarettes


At any idle moment from "Revally to lights out," even before, during or after the stress of your busiest hour smoke a **PLAYER'S NAVY CUT CIGARETTE**

THE TOBACCO IS RIGHT.  
 THE SIZE IS RIGHT.  
 THE PRICE IS RIGHT.


Cartons of 10 - - - 3d.  
 Cartons of 20 - - - 5½d.  
 Card boxes of 50 - - 1/1½  
 Card boxes of 100 - - 2/3  
 Airtight tins of 50 - - 1/2




P 201



All Diamonds set in platinum, **£8 0 0**



Real Pearl and Diamonds, set in platinum, **£2 18 6**




Real Pearls and Diamonds set in platinum, **£5 0 0**

### CHAS. PACKER & CO.

*Manufacturing Jewellers and Silversmiths.*


**Dainty Designs in Real Gem Neckslides**




Real Pearls and Diamonds set in platinum, **£6 15 0**

The Illustrated Book of Earrings.  
 General Catalogue of Jewellery, Watches, Silver, and Electro Plate.  
 Complete Catalogue of Mourning Jewellery.  
 Special Catalogue of Cups and Bowls for Prizes and Presentations.  
 Post Free on application.


**76 & 78, REGENT STREET, LONDON, W.**



All Diamonds set in platinum, **£5 5 0**



Real Pearls and Diamonds set in platinum, **£5 15 0**



Real Pearls and Diamonds set in platinum, **£4 10 0**

All these ornaments are designed, made, and supplied by us at actual manufacturers' prices.

A large selection of gem neckslides in numerous designs for wear in the prevailing fashion.

**If your eyes could see**

the impurities in your present drinking-water you would not hesitate a moment to install a

**"Berkefeld" Filter**

which renders all drinking-water pure, sparkling, and harmless. In use in all the leading Hospitals. Acknowledged by the Medical Profession. Awarded several Grands Prix, Gold Medals, and Diploma of Honour.

**TO BE OBTAINED EVERYWHERE.**

Write for Catalogue "W" to  
**THE "BERKEFELD" FILTER CO., LTD.,**  
 121, OXFORD STREET, W.



## LOTUS

It scarcely seemed possible, but Lotus have again raised the standard of factory shoe-making and brought their work still nearer the perfection of that done entirely by hand. Lotus for 1912 are splendidly made. Supplied by nearly 700 agents in London and the Provinces. Illustrated catalogue and local agent's address sent on request.

Letters:  
 The Lotus Shoe Makers, Stafford  
 Telephone:  
 No. 6989 London Wall



Men's 22/6, Women's 17/9  
 Black and brown golf shoes—splendidly made



## THE HENRY BELL MEMORIAL.

IN connection with the celebrations at Glasgow (illustrated in our Supplement) in honour of the centenary of the *Comet*, the first passenger steam-boat to ply regularly on British waters, the Centenary Committee of the Glasgow Corporation are appealing for funds to establish a permanent memorial to the owner of the *Comet*—Henry Bell, who was the practical pioneer of British steam navigation. Part of this permanent

now invited. . . . Subscriptions should be sent to the Honorary Treasurer, Mr. John S. Samuel, Lord Provost's Secretary, City Chambers, Glasgow.

## NATURE IN ITALIAN ART.

THE object of Miss Salter's "Nature in Italian Art: A Study of Landscape Backgrounds from Giotto to Tintoretto" (Black) is "to show that there existed from the thirteenth century an attempt to study Nature for

her own sake." One had thought it required little proof. Ever since artists have eaten salads and chicken, and perhaps before the days of chicken, they have been attentive to Nature, which is taken by Miss Salter "to include flowers and beasts." Wherever she had pitched her dates she could have made

fruits, nuts, fir-cones, acorns, seed-pods, and the like" are her commoner stock-in-trade; Tintoretto's palm-trees, resplendent in moonlight, Bazzi's acacia bursting into leaf, Mantegna's favourite hill, and Piero della Francesca's little fleet of clouds, are all in her collection. She notes when trees first cast shadows in Italian pigment; and doubtless she knows when it first rained upon an Umbrian panel. Particularly good are her words of Tintoretto, whose "wild energy of dreams" did not necessarily lead him from Nature. "Bassano" (she quotes Mr. Berenson, "though probably many will not agree with him") "was the first modern landscape-painter. Without intending it he was the first Italian who tried to paint the country as it really is, and not arranged to look like scenery." All such assertions grow doubtful in the light of research so vigilant as Miss Salter's. Her book, which is delightfully illustrated, stops long short of the painter who "set the sun in the heavens." And yet there is no little sun in its pages, and enough Ruskin to remind us that the subject is his own for ever.



Photo. Abraham.

PART OF A PERMANENT MEMORIAL TO THE PIONEER OF BRITISH STEAM NAVIGATION: H.M.S.Y. "VIVID," TO BE USED AS A TRAINING-SHIP FOR THE MERCANTILE MARINE, IN MEMORY OF HENRY BELL.

memorial is to take the form of a training-ship for students of the Royal Technical College, Glasgow, to learn the practical work of navigation and engineering with a view to becoming officers in the Merchant Service. The other part of the Memorial will consist of the endowment of engineering research scholarships at the College. There has long been an urgent need in Scotland for a training-ship for the mercantile marine, for hitherto young officers have had to pick up their practical knowledge of navigation in a rough-and-ready way during their apprenticeship at sea. The committee have obtained the option of purchasing H.M.S.Y. *Vivid*, lately stationed at Devonport as the yacht of the Commander-in-Chief. This vessel, of which an illustration is here given, could readily be adapted for the purposes of a training-ship. It was built by Messrs. Barclay Curle and Co, for the late Lord Inverclyde. To quote the appeal: "It is towards the maintenance of this vessel—the new *Comet*—and her successors, that subscriptions are

her points. The Bull of Nineveh would not, perhaps, pass muster with the strict naturalist; but a striking and genuine collection of authentic creatures could be made among the British Museum's ancient stones. But, given a period starting with the thirteenth century, the harvest and the bag are rich ones, and Miss Salter indulges a very charming hobby very charmingly. She seems quite at home with her Hermit Saints and their lions, among sudden, unthinkable little mountains; "flowers, birds,



THE FIRST MERCHANT-SHIP BUILT TO FLOAT WITH FOUR COMPARTMENTS FLOODED: THE NEW CANADIAN PACIFIC LINER, "EMPRESS OF RUSSIA."

The "Empress of Russia," one of two new liners (the other being the "Empress of Asia") built for the C.P.R. by the Fairfield Shipbuilding Company at Govan, is 570 feet in length, with a gross tonnage of 15,000. Each boat will cost about £500,000. At the launch of the "Empress of Russia" the other day, Mr. Alexander Gracie, Chairman of the Fairfield Company, said that, as far as he knew, she was the first merchant-vessel constructed to float with four water-tight compartments flooded, instead of the two which have hitherto formed the Board of Trade standard of safety. The new boats are to run between Vancouver, Yokohama, and Hong-Kong. They have the most up-to-date and comfortable accommodation, and carry 200 first-class, 100 second-class, and 800 third-class passengers. A feature of their construction is the cruiser stern, both vessels being so fitted that they could be converted into armoured cruisers at a moment's notice.

"A Maple Bedroom gives a note of distinction to the house"

# MAPLE & CO

LTD

have absolutely the largest selection in the World of  
**BEDROOM SUITES**  
at most favourable prices



5 ft. Bedroom Suites, in various woods, from £12:10:0

The Galleries are open daily for your inspection, all the Suites are marked in plain figures, or Catalogues will be sent on application.

Tottenham Court Road London and Paris



**Fry's** PURE BREAKFAST  
**Cocoa**

MAKERS TO  
H.M. THE KING, H.M. THE QUEEN  
AND H.M. QUEEN ALEXANDRA.





*Hulloa! I am using*

## COLGATE'S SHAVING STICK

See what a perfect lather it is making? No rubbing in is necessary. Nothing in Colgate's that can "smart." It soothes, refreshes and comforts the face and makes shaving a pleasure. *Try it—and prove it!*

Buy Colgate's at your dealers or if you wish a trial stick send 2d. in stamps.

COLGATE & CO. (Dept. L4) 46, Holborn Viaduct, London, E.C.  
ESTABLISHED 1806 MAKERS OF COLGATE'S RIBBON DENTAL CREAM



*"Oh, Daddy, isn't your chin smooth!"*

**Y**OU can't beat the "**Kropf**" Razor if you want a shave that is a *real* shave—a *clean* shave—a *close* shave. That is because the "**Kropf**" hollow ground process keeps the razor edge sharp and keen—always.

The "**Kropf**" never "pulls" or "scrapes"—never causes irritation or soreness. It just gives you the best shave you could wish for. Remember that the initial cost of the "**Kropf**" is the *only* cost. It lasts a lifetime. Get one to-day.

## KROPP RAZOR

In One Quality Only—the best.

Black Handle, 5/6.

Ivory Handle, 7/6.

Ask for a "**Kropf**"—and, for the sake of your face—see that you get it. The name "**Kropf**" and "*Made in England*" on the tang of the blade identifies the genuine. Refuse substitutes.

If unable to obtain, write for name of nearest Agent to Osborne, Garrett & Co., London, W.

*Fisher's A.D.*



BY APPOINTMENT.

## LEA & PERRINS' SAUCE

with Sandwiches.

The Original and Genuine  
WORCESTERSHIRE.



### THE INSURANCE ACT.

*"As the Tax we can't abolish,  
Ma's abolished Mary Ann,  
For with Cherry Blossom Polish  
I can clean the boots—I  
can!"*

*Just smear them so, rub half a mo.,  
And they are shining spick and  
span!  
It is the quickest shine I know,  
Just suited to the busy man."*







## GOVERNMENT PRISM BINOCULARS

As used by the British Army.

**Made to the British Govt. Specification.**

INCREASED LIGHT-GATHERING POWER, STEREOSCOPIC EFFECT, AND PERFECT DEFINITION OVER THE ENTIRE FIELD.

Dust and Damp Proof. Will withstand the extremes of all climates.

MAGNIFICATION ... 6 DIAMETERS  
(15 times superficial area.)  
FIELD OF VIEW ... 8.7 DEGREES  
(153 yards at 1000.)  
LIGHT VALUE ... 12.5  
WEIGHT ... 19 OZ.

Call and inspect the latest Prism Binocular, or send for Price List No. 6 M, which gives complete specification.

To Readers of "The Illustrated London News" 7 days' free trial on receipt of deposit or good references in London or Leeds.

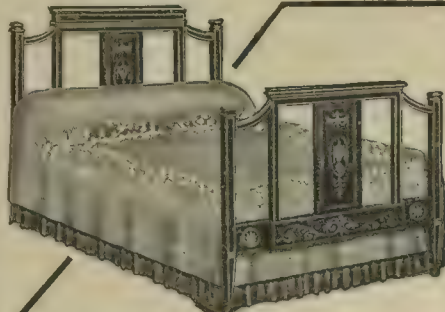


The "MARK I," as illustrated, £6 5 0  
The "LUMAC," a similar glass, with central-screw focussing, £7 0 0  
Including box: solid leather sling case and lanyard. Postage and packing free to any part of the world.

**AITCHISON & Co., Ltd.,** Opticians to the British and Foreign Governments.  
428, Strand, W.C.; 167-168, Fleet Street, E.C.; 281, Oxford Street, W.  
And Branches, London. Leeds: 37, Bond Street. (No doors west of Oxford Circus).



THE "MARK I"  
ARMY MODEL.



By Royal Warrant  
to Their Majesties

## IRISH BED LINEN

Bed Linen woven in our Banbridge factory has long been renowned for its evenness and hard-wearing quality. It has the additional merit of genuine worth.

No. K 60.—Irish Linen Bedspread, hemstitched and fringed, 33 -  
by hand, 8 ft. 6 in. by 21 ft. 6 in.  
A large and soft, best quality, made at all times.  
No. B 60.—Irish Linen Sheets, 2 by 21 ft. 6 in. 17/6  
Hemstitched. From, per pair  
No. B 60.—Irish Linen Pillow Cases, 20 by 26/6  
30 inches. From each  
No. V 11.—Irish Linen Bed Valance, hem- 1/6  
stitched, 19 inches deep. Per yard

No. W 11.—Irish Linen Face Towels, 20 by 40 inches.  
Plain Huck tow, hemstitched, with Fancy 12/6  
Border. Per dozen  
No. 22.—Irish Linen Hemstitched Handkerchiefs, 8/9  
10 in. 3 1/2 by 4 1/2, 14 in. hem.  
hemstitched, 10 in. 3 1/2 by 4 1/2, 14 in. hem.

PRICE LISTS AND SAMPLES POST FREE.

**ROBINSON & CLEAVER, Ltd.,**  
40b, Donegall Place, LIVERPOOL.  
LONDON. BELFAST.

## CONTINENTAL HOTELS.

**BOULOGNE-SUR-MER. GRAND HOTEL**  
CHRISTOL & BRISTOL. Restaurant, Strictly First Class, Central

**DIEPPE.—HOTEL DES ETRANGERS.**  
Entirely re-decorated. Pension Terms for September 17/8, 8/6,  
and 10/- per day per person.

**LUGANO.—GRAND & PALACE HOTEL.**  
Finest and largest, in best position on the Lake. Every  
modern comfort. Tennis, garage.

Just the very thing  
for your pocket,

neither too large nor too small, too  
thick nor too thin, but just right.  
Handy? Why, almost mechan-  
ically you perform the action  
necessary to bring up the lead, so  
it's ready for use the instant it is  
taken from the Pocket.

L. &amp; C. HARDTMUTH'S

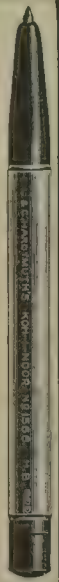
"Koh-i-noor  
Propelling  
Pencils

Fitted with the famous "Koh-i-noor"

lead.  
—Always ready for use.  
—Never require sharpening.  
—Do not get out of order.

Prices from 9d. upwards.  
Of Stationers, &c., everywhere.

List free from  
L. & C. HARDTMUTH, LTD.,  
Koh-i-noor House, Kingway, London.



## HOVENDEN'S

### "EASY" HAIR CURLER

WILL NOT ENTANGLE OR BREAK THE HAIR.



FACTORY OF LABEL



FACTORY OF LABEL



FACTORY OF LABEL



FACTORY OF LABEL

ARE EFFECTIVE,  
AND REQUIRE NO SKILL  
TO USE.

For Very Bold Curls

TRY CO.

"IMPERIAL"

CURLERS.

SAME PRICE

12 CURLERS IN BOX.

Post Free for 10 Stamps

OF ALL HAIRDRESSERS, &amp;c.

BEWARE OF

SPURIOUS

IMITATIONS.

The genuine

hair curler

is only to be

obtained from

Hovenden &amp; Sons, Ltd.,

Barnes Street, W., &amp; CITY ROAD, E.C.

LONDON.

### Oakey's "WELLINGTON" Knife Polish

The Original Preparation for Cleaning and Polishing Cutlery,  
and all Steel, Iron, Brass, and Copper articles. Sold by Stationers  
at 3d., 6d., & 1s., by Grocers, Ironmongers, Oilmen, &c.  
Wellington Emery and Black Lead Mills, London, S.E.



## Crests, &c.,

Painted direct on MOTOR CARS, or Transfers pre-  
pared for local carriage-builders to apply

Heraldic Painting, Engraving, and Enamelling  
for all purposes.

English and Foreign Heraldry.  
Pedigrees Traced.

## CULLETON'S HERALDIC OFFICE,

82, Piccadilly, London.

## THE WORLD-FAMED Angelus PLAYER PIANOS

the extraordinary success of  
which is undoubtedly due to  
their Artistic Supremacy, Reliability, and Moderate Prices.  
SIR HERBERT MARSHALL & SONS, LTD.,  
Dept. 2, Angelus Hall, Regent House, Regent Street, London.



## HADA VERITAS HAIR RESTORER

Is not a Dye, but the Genuine Restorer; and for over  
15 years has never failed to restore Grey or Faded Hair

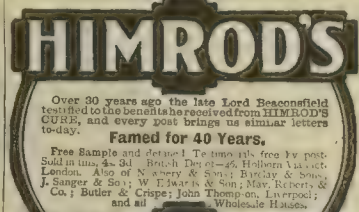
in a few days.

HARMLESS, EFFECTUAL, AND PERMANENT.

Circulars and Analysts' Certificate Post Free. Sold by

HaIRDRESSERS, Chemists, &c., in Cases, 6 each.

Wholesale Agents: R. HOVENDEN & SONS, LTD.,  
29-33, Berners St., W., & 91-95, City Rd., London, E.C.



## HIMROD'S CURE FOR ASTHMA

Over 30 years ago the late Lord Beaconsfield  
testified to the benefits he received from HIMROD'S  
CURE, and every post brings us similar letters  
to-day.

Famed for 40 Years.

Free Sample and detailed Testimony free by post.

Sold in this country by the following: Messrs. J. & W. Baker,  
London. Also of Newbery & Sons, Bury; and Sons,  
J. Sanger & Son; W. T. Lewis & Son; May, Roberts &  
Co.; Butler & Crisp; John Thompson, Liverpool;  
and all Wholesale Houses.



Sold everywhere 6s. 1/2 2s. 4d.

## Hinde's

Drapers, Stores, Hairdressers,  
Everywhere. 6d. & 1/- the Box.

**Hair Wavers.**

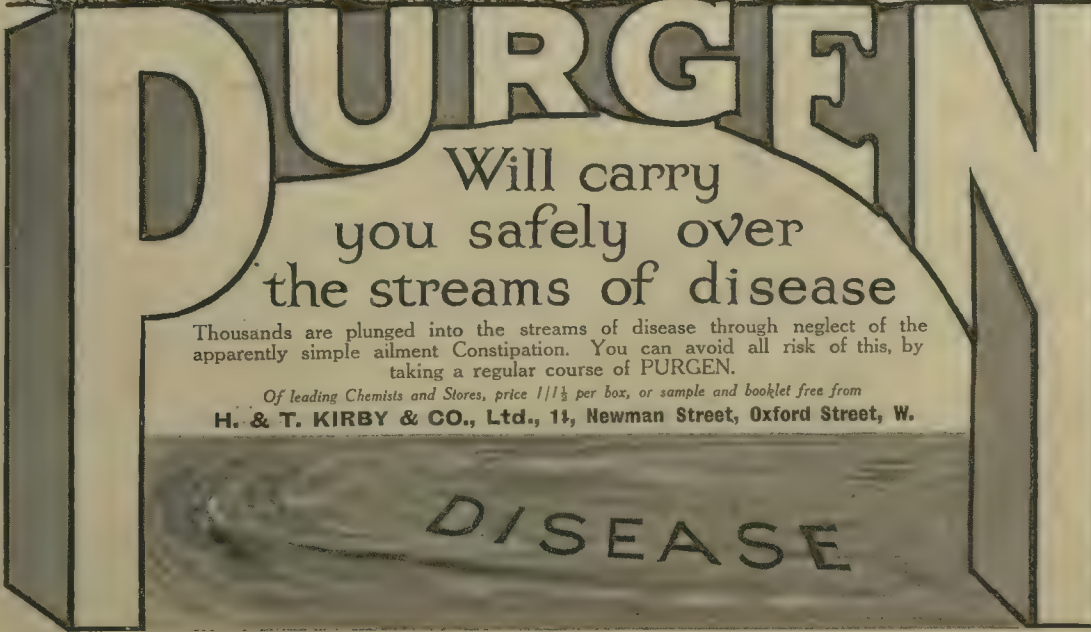


SHOULD BE MADE SWEET, MENTHOL  
WITH  
"SANITAS"  
DISINFECTANTS

## YOUR HAIR. YOU CAN SAVE IT.

By sending some combings, for expert examination  
and free advice, to

Prof. Harley Parker, 117, St. George's Rd.,  
Warwick Square, London, S.W.



Will carry  
you safely over  
the streams of disease

Thousands are plunged into the streams of disease through neglect of the  
apparently simple ailment Constipation. You can avoid all risk of this, by  
taking a regular course of PURGEN.

Of leading Chemists and Stores, price 1/1 1/2 per box, or sample and booklet free from  
H. & T. KIRBY & CO., Ltd., 11, Newman Street, Oxford Street, W.

DISEASE



## THE CHRONICLE OF THE CAR.

## The Problem of the Car-Thief.

Is there such a problem as the one connoted by the line which heads this paragraph? I think there is, for the reason that I read with almost disquieting frequency of cars being stolen from garages and left stranded by the roadside, miles away from home, and even of cars which have been left standing outside places at which their legitimate owners are paying calls being driven away, *sans cérémonie*, by unauthorised persons. This is apart altogether from the question of the joy-riding chauffeur, which is an admittedly acute one, and one which seems almost impossible of solution. Taking first the matter of the out-and-out theft of cars, I do not think we have as much reason to fear this sort of contretemps as might really be the case. Fortunately, a stolen car is apt to become something of a white elephant on the hands of its purloiner, because we have not quite got to the stage in which a regular larciness can be made of so altering the illegitimately acquired car that it cannot be identified, and can thus be converted into a readily negotiable asset. If that were the case, as it is with other kinds of portable property, I imagine that the problem of the car-thief would rapidly develop into an acute one. In these progressive days, it is the exception rather than the

rule to find anyone who has not at least a fair smattering of mechanical lore, and I was almost on the point of committing myself to the statement that everyone is sufficiently well acquainted with the working and mechanism of the car to be able to drive it. That would be too sweeping,

necessary to leave the car standing unattended for hours at a time, it is rather surprising that car-manufacturers have not bethought them of incorporating in the design of their vehicles some sort of fitment which would render them thief-proof. Certainly there are one or two devices which achieve the desired effect. One of the best is the ignition-switch lock, which, once the current is switched off, can only be put to "on" position by the use of a special key, and which ought to be fitted to every car in which the saving of the ultimate penny is not essential. Then there are devices for locking brake and gear-levers, but of these I do not think very much, because they entail a separate operation to bring them into effect, and the motorist is too apt to forget them or else to think that he need not trouble about locking things up at every stop. A dodge I have often employed, especially when leaving a car for the night in a strange garage, is to remove the porcelain cap over the safety-gap of the magnet and drop in a couple of halfpennies, afterwards replacing the cap. I don't know if many attempts have ever been made to go joy-riding on cars I have treated in this way, but if anything of the sort did perchance happen, I must have missed quite a lot of quiet amusement. To my mind, there is nothing like the switch-lock, for not only does it completely baffle the car-thief, but

*(Continued overleaf.)*



JUST THE CAR FOR MOTOR-CAMPING; A METALLURGIQUE IN A SECLUDED NOOK FOR A PICNIC.

Motor-camping is excellent if the party is provided with a suitable car. The Metallurgiques are well adapted for the rough-and-tumble going over cart-tracks and fields which is usual on such occasions,

but it is still sufficiently near the mark when it is understood that the word "everyone" is used in its generally accepted sense. As mechanical knowledge spreads, the risk we run of having our cars removed from our own lawful custody becomes greater, and the need for caution increases.

Considering the large number of owner-driven cars now in use and the fact that it is often



MOTORING IN SIR PHILIP SIDNEY'S COUNTRY: AN 11-H.P. HUMBER OUTSIDE THE LYCH-GATE AT PENSURST, HIS BIRTHPLACE.

Penshurst Place, in Kent, is one of the most beautiful and interesting of old English country houses. In it was born, in the year 1554, that pattern of chivalry, Sir Philip Sidney, and, in 1622, the ill-fated Algernon Sidney.



*Photo. Central-Photos.*

RECORDING THE ALTITUDE OF RIVAL BOMB-DROPPERS: OFFICERS TAKING OBSERVATIONS AT THE MICHELIN AERO-TARGET COMPETITION.

This year's Michelin Aero-Target Competition was won the other day by the pilot Gaubert, carrying as marksman an American, Lieutenant Scott. The first prize was 50,000 francs, and there was a second prize of 25,000 francs.

## THE VALUE OF STAUNCH TOURING TYRES

cannot be over-estimated, and nothing resists hard road wear like a set of

# DUNLOP

### GROOVED PATTERN TYRES.

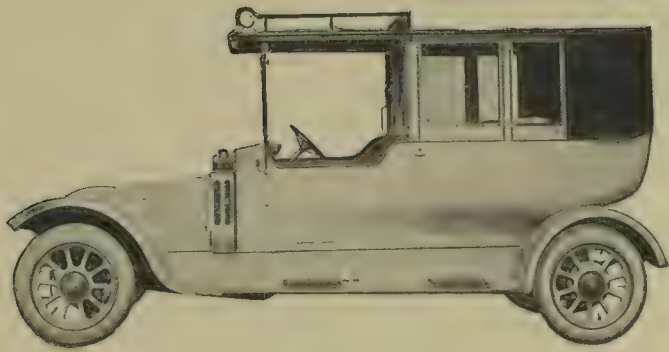
The majority of the world's motorists substantiate this fact from personal experience. Neither are they less enthusiastic regarding the delightful travelling comfort accruing from the resilience of grooved Dunlops.

*Particulars of Dunlop tyres and detachable wire wheels—the finest touring equipment possible—in catalogue—post free.*

The Dunlop Tyre Co., Ltd., Aston Cross, Birmingham; and  
11, Regent Street, London, S.W.  
Paris: 4, Rue du Colonel Moll.  
Berlin: S.W., 13, Alexandrinenstrasse, 110.  
Make a point of trying the new Dunlop patent V golf ball.







Landaulette at £530.

### Arrol-Johnston Cars.

THIS Season, orders came in for some forty cars per week, and we are now building new Works to fill the demand.

ARROL-JOHNSTON, Ltd., PAISLEY.  
London Agents:  
The Long Acre Autocar Car Co., Ltd., 127, Long Acre, W.C.

## The Royal Automobile Club's Great Test of the Self-Starting

Self-Starting.  
Self-Igniting.  
Self-Lighting.

# Cadillac Cars

sets the seal on the most striking automobile development that has taken place for years.

### FOUR OUTSTANDING FEATURES OF THE TEST.

(The extracts from the R.A.C. Certificate are given in inverted commas.)

#### 1. GENUINENESS OF THE TRIAL.

The cars tested were sent over for sale in the ordinary manner. There was no preliminary tuning up, and two of those selected by the official observer were, in their crates up to a few hours before the trial.

#### 2. RAPID STARTING.

"The average starting was 4/5 secs." Compare this with the average time taken for starting the engine by the crank and getting back to the driving-seat.

#### 3. ABSOLUTE CERTAINTY.

"Three thousand starts (1,000 starts per car) were made without any hesitation at

any time, and on no occasion did the starter fail in operation."

This is a proof of the absolute reliability of the system. Since they left Detroit, some months before, the cars had not been touched. Under such conditions there was a ready excuse in case of failure, but that complete success was attained the Certificate abundantly shows.

#### 4. CADILLAC THOROUGHNESS.

The whole trial emphasises the thoroughness of Cadillac factory methods, and proves in a most convincing manner the excellent condition in which the cars are sent out, nothing more being necessary than to fix the batteries, fill up with petrol and oil, and start away.

Write for a copy of the R.A.C. Certificate. Nearly 11,000 of these Cadillac Cars are in use, and every one giving the greatest satisfaction. Illustrated Catalogue on request. Trials arranged.

**F. S. BENNETT, Ltd. (Cadillac Motors, Limited),**  
CADILLAC CORNER, 219-229, Shaftesbury Avenue, London, W.C.

Telegrams: "Eftaben, Westcent, London."

Telephones: Gerrard 9263 and 9266.



THE ONLY

# BEDFORD CAR

entered  
RUSSIAN IMPERIAL AUTOMOBILE TRIALS  
WINS

## GOLD POKAL

(Gold Cup, height 30 inches, weight 153 ozs.)

June 30 to July 14  
1912.  
14 DAYS  
1400 POINTS.  
Highest Possible.



THE ONLY CAR  
to  
complete RACE  
with a  
PERFECT SCORE.

THE MOST SEVERE

COMPETITION OF THE YEAR.

4-CYL.

3-Speed

CHASSIS, 15-18 h.p. £175; 18-22 h.p. £220; 28-32 h.p. £295  
50 Styles of Bodies. Exclusive, Dainty, Practical Designs.

# BUICK

4-CYL.

"SIXTEEN" complete car, 2-seater body, 5 lamps, horn, tools, generator, quick detachable rims and tyres. £200.

16 h.p. 4-seater, £240; 20 h.p. 2-seater, £245; 20 h.p. 5-seater, £295.

OAKLAND 30 h.p. 4-seater, £300; 40 h.p. 5-seater, £355; 45 h.p. 7-seater, £380.  
OLDSMOBILE, CARTER CAR, G.M.C. TRUCKS, VANS and LORRIES 1 to 6 TONS.  
Telegrams—"Jelanco, London,"  
J. EDWARD LAMBIE, Managing Director.  
GENERAL MOTORS (Europe), Ltd.  
Bedford House, Long Acre, London, W.C.



THE BEDFORD "FIFTEEN" has never been equalled.

The amazing triumph of the

# SUNBEAMS

in the GRAND PRIX.  
1st, 2nd, & 3rd (in the three litre class).  
Awarded L'Auto Grand Prix Cup.  
Awarded Coupe de Régularité.

Added to what they have done elsewhere, this proves that the SUNBEAM is beyond all doubt the best car it is possible to buy. They were pitted against the flower of the industry, and the majority of their competitors were of far greater power. The three winning SUNBEAMS were fitted with MICHELIN TYRES and GOODYEAR WHEELS.

THREE MODELS:  
12-16 h.p.; 16-20 h.p.  
4 cyl.; 25-30 h.p. 6 cyl.

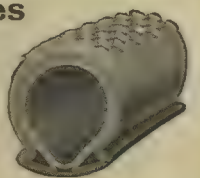
THE SUNBEAM MOTOR CAR CO., Ltd.,  
Upper Villiers Street, Wolverhampton.  
Agents for London and District—  
J. KEELE, Ltd., 72, New Bond Street, W.

## Measured by Miles

Goodrich Tyres are easily the most economical unit in motoring expenditure.

Many motorists know this, and touch a dividend on their superior knowledge.

Others—dwellers in outer darkness—do not. They should try



# GOODRICH TYRES

Goodrich rubber is the very muscle of rubber: The Goodrich casing a frame of incomparable strength and exact proportion—the whole a perfectly balanced example of tyre science.

Manufactured by

THE B. F. GOODRICH CO., LTD.  
Golden Lane, London, E.C.





Continued.]

so long as the owner keeps the key in his own possession, it also precludes the unauthorised use of the car by his own servants.

#### The American "Invasion."

There is much talk at the present time of the American "invasion." Ten years ago we had a similar invasion of the British market, though not, of course, on anything like the scale to which the present one has attained. That one, however, had but a very short tenure of life, for the all-sufficient reason that the American car of that time was a pretty rotten proposition at its best—I am speaking of the cheaper class of vehicle, which was intended to appeal to the motorist of comparatively limited means. Its life was of the shortest, and short as was its existence, it was full of trouble. I find in many quarters a marked disposition to judge of the ultimate fate of the present invasion by that of the last. I often hear it said that in two years at the outside the vogue will have run its course, and the American car will have disappeared from British roads. In that I think we are deluding ourselves, because the American car which is

right. It is in cost of production that the Americans excel, and that solely because they are able to build in thousands where we build in tens or at most in hundreds. Take, for example, the case of the Ford Company, which, it is said, contemplates turning out a quarter of a million cars next year. I frankly do not like the car, which to my mind has faults which make it unsuitable for motoring on English roads; but we cannot get away from the fact that it sells, mainly because of its low price, which in turn is made possible by enormous output. The only way in which we can hope to compete in the cheap-car market is by achieving similar outputs to those of the big American factories, and to do that argues a large combine on the lines suggested by Mr. Letts.

#### A Sleeve-Valve Motor-Cycle?

It is said that the Argyll sleeve-valve engine is to be applied to the motor-cycle. If this is so, the experiment should be an exceedingly interesting one, especially if it is in contemplation to employ air-cooling. Yet another development is the application of this single-sleeve system to marine work, for which it seems eminently suitable.—W. WHITTALL.

#### WILLS AND BEQUESTS.

THE will of Mr. EDWARD PERCY BARLOW, of Kearsney Court, near Dover, who died on June 23, is proved by Frank Lewis Thornhill Barlow, son, and Travers B. Harby, the value of the estate being £134,033. He gives £500 to his wife; 1500 £10 ordinary shares in Wiggins Teape and Co. to his son Frank; 1500 shares in trust for his son Neith; and 1000 £10 preference shares in trust for each of his daughters, Barbara Barlow and Theodora Martyn. All other his property is to be held in trust to pay the income thereof to his wife during widowhood, or an annuity of £300 should she again marry. Subject thereto the remainder of his preference shares in Wiggins Teape and Co. are to be held in trust for his daughters, 2670 ordinary shares in trust for his sons, and the residue in trust for his children.

The will (dated Feb. 18, 1903) of Sir PYERS WILLIAM MOSTYN, Bt., on May 10, is proved by Dame Anna Maria Mostyn, widow, and Edward Joseph Mostyn, the value of the real and personal estate being £116,598. He gives the Holywell Estate, other lands and premises, £1000, and the income from stocks and shares to his wife; £200 per annum

to his daughter Helen; £500 to his daughter Clementina; and on the decease of Lady Mostyn certain securities to his son and daughters Clementina and Agnes. Under the provisions of the settlement of the family estate he appoints £10,000 to his daughters Clementina and Agnes. The residue is to be held in trust for his son on attaining twenty-five years of age.

The will (dated May 19, 1910) of SIR THOMAS WILLIAM BOORD, Bt., of Oldbury Place, Ightham, Kent, formerly M.P. for Greenwich, who died on May 3, is proved by his sons, Harry Percy Boord and Alexander Edgar Boord, the value of the property being £27,884. The testator leaves all his estate and effects to his wife for life, and subject thereto his shares in Boord and Son are to be held in trust to pay the income thereof to his five children for life, and, on the death of his two daughters, divided between his three sons; and the residue held in trust for his two daughters.

The following important wills have been proved—

Mr. John Lang Macfarlane, 2, Lancaster Terrace, Great Western Road, Kelvinside, Glasgow, and of Macfarlane, Lang and Co., biscuit manufacturers	£269,018
Mr. Isaac Thomas Glasbrook, Norton House, Oystermouth, died intestate	£247,070
Mr. George Binns, Broomhall Road, Sheffield	£218,729
Mr. Thomas Fairhurst, Kilbey Court, Worthington, Lancs	£163,397
Mr. James Samuel Burroughes, F.R.G.S., The Homestead, Seaford, and Moses Farm, Lurgashall, Petworth, Chairman of Burroughes and Watts, Ltd., Soho Square	£90,050



MOTURING IN SHAKESPEARE'S COUNTRY: A 24-30-H.P. SIX-CYLINDER WOLSELEY LIMOUSINE (1912 MODEL) ON THE ROAD NEAR KINETON, WARWICKSHIRE.

being imported into this country to-day is not, generally speaking, a bad car, but a very good one, and excellent value at the price at which it sells. Mr. W. M. Letts, who is certainly an authority on such matters, advocates a big combination among the British trade to build a light, cheap car on American lines, and therein I believe he is

of Talacre Hall, Flint, and 53, Onslow Gardens, who died on May 10, is proved by Dame Anna Maria Mostyn, widow, and Edward Joseph Mostyn, the value of the real and personal estate being £116,598. He gives the Holywell Estate, other lands and premises, £1000, and the income from stocks and shares to his wife; £200 per annum



TO COMMEMORATE THE CENTENARY OF THE MAJESTY TURF CLUB: THE GOLD CUP PRESENTED BY PAST AND PRESENT CIVIL SERVANTS OF THE COLONY.

This handsome trophy, which is in solid gold, is of Greek design, and is surmounted by a figure of Winged Victory. It was designed and made by the Goldsmiths and Silversmiths Company, Ltd., of 112, Regent Street, London, W.

## SIMPLICITY with STRENGTH.

Not one ounce of wheel-strength is sacrificed, yet the

# Continental DETACHABLE RIM

is so simple that it can't jam, can't loosen. A change can be made in two minutes by unscrewing 5 nuts. No other rim combines Simplicity, Security, and Solidity to such an extent.

#### PRICES ON APPLICATION.

THE CONTINENTAL TYRE & RUBBER CO. (GT. BRITAIN), LTD.,  
3-4, THURLOE PLACE, LONDON, S.W.

Repair Works: HYTHE ROAD, WILLESDEN.

Any make of cover or tube repaired in two to four days after receipt of instructions, according to the nature of damage.





# THE CENTENARY OF THE LAUNCH OF BELL'S "COMET": GLASGOW & THE CELEBRATIONS.



"TO THE MEMORY OF HENRY BELL": THE CHIEF TOAST GIVEN AT THE "COMET" CENTENARY LUNCHEON, AT GLASGOW.

BY MR. M'KINNON WOOD, SECRETARY FOR SCOTLAND.

The luncheon which formed a part of Glasgow's festivities in celebration of the centenary of the launch of Henry Bell's steam-ship, the "Comet," was an exceptionally interesting function. The Corporation entertained some four hundred and fifty guests, including the Secretary for Scotland, and famous shipowners, engineers, and business men. Mr. M'Kinnon Wood, proposing "The Memory of Henry Bell," said that Bell had prescience, tenacity of purpose, and great courage. He died a poor man, but he would have died in actual want had not the Clyde Trustees granted him £100 a year; while the Government presented him with the inadequate gift of £200. The Clyde, he went on, has never lost the prestige it owes to Bell. He launched the first steam-ship upon waters which have since borne thousands of great ships, the carriers

of the commerce of the world. The banks he passed on his early voyages are now covered with ship-building yards whence are launched the finest merchantmen and war-ships, many of them a thousand times as large as the little "Comet." From left to right, the chief figures are: Captain C. L. Napier, Sir Hugh Shaw-Stewart, Bt., the Right Hon. James Caldwell, the Right Hon. Alexander Ure, Lord Lamington, the Right Hon. Thomas M'Kinnon Wood, Lord Provost Stevenson, Admiral Sir John Jellicoe, the Marquess of Ailes, Lord Kingsburgh (the Right Hon. Sir John Hay Athole Macdonald, Lord Justice-Clerk of Scotland), the Right Hon. C. Scott Dickson, the Right Hon. James Parker Smith, and Sir Charles Bine Renshaw, Bt. The whole proceedings passed off most successfully.

DRAWN BY S. BEGG, OUR SPECIAL ARTIST AT GLASGOW.



THE  
CENTENARY OF THE FIRST  
PASSENGER STEAM-BOAT  
IN EUROPE:  
HENRY BELL AND THE  
"COMET."

OF the many anniversaries of important events in our national history which have called for celebration this year, or still call for it, none is of greater interest than that of August 6. On that day, one hundred years ago, the steam-boat *Comet* made her first trip on the river Clyde and heralded an epoch in the progress of civilisation, as well as a great triumph for man in his persistent fight against the elements. This tiny germ was the precursor of the floating palaces of the present day and the mercantile and naval services of the world.

The idea of steam navigation dates as far back as the year 1543, when a Spanish captain named Blasco de Garay experimented in Barcelona Harbour with a steam-boat of his own invention. This vessel, which was of 200 tons burden, attained a speed of three miles per hour. In 1736 various trials were made on the Severn; and in the later half of that century both Frenchmen and Americans were engaged in attempts to solve the problem of steam navigation.

In 1788 William Symington, a native of Leadhills, Lanarkshire, achieved success by propelling a double-keeled vessel on Dalswinton Loch, Dumfriesshire, and in 1789 he fitted out a larger boat with



THE BUILDER OF THE STEAM-BOAT "COMET", JOHN WOOD.

engines, which was propelled at a speed of six miles per hour on the Forth and Clyde Canal. His *Charlotte Dundas*, a stern-wheeler, built at Grangemouth in 1801, made an experimental trip to Glasgow, and was intended for towing sloops on the Forth and Clyde Canal, but was withdrawn owing to the damage caused to the banks through the wash of the paddles. It was on this vessel that Fulton, the American engineer, who claimed to be the inventor of steam navigation, was, on one occasion, a passenger, and made the acquaintance of Symington. In 1803 another attempt was made by Symington with his second *Charlotte Dundas*, but the Directors of the Forth and Clyde Canal, with a lack of foresight, and being apprehensive of their banks, ordered this boat to cease operations. Symington's experiments, so far fairly successful, had involved him in financial difficulties. He died in London in 1831, and was buried in the churchyard of St. Botolph, Aldgate.

Something of the perverse fate which dogged the efforts of Symington to convince his contemporaries of the great method of navigation attended the work of Henry Bell. Bell, however, has the distinction of producing the first practical steam-boat to ply regularly on European waters. He was born at Linlithgow on April 7, 1767, and was first employed as a



OWNER AND DESIGNER OF THE "COMET," THE FIRST PASSENGER-CARRYING STEAMER ON THE CLYDE, HENRY BELL.

stonemason. Three years at that trade proved enough for him, and he subsequently served an apprenticeship as a mechanic.

During the time Symington was experimenting on Dalswinton Loch and the Forth and Clyde Canal, Bell was studying the possibilities of steam for the propulsion of ships. As early as 1800, a year before the appearance of the

utility of an invention whereby vessels might be driven against wind and tide. The Lords of the Admiralty came to the conclusion that his scheme was unworkable, and could not give him their support. Lord Nelson, however, was a warm supporter of Bell's plans, and saw with a clear eye the vast possibilities of the enterprise. It is recorded that he threw out a serious warning to their Lordships in the following famous words—

"My Lords and Gentlemen,—If you do not adopt Mr. Bell's scheme, other nations will, and in the end vex every vein in the Empire. It will succeed, and you should encourage Mr. Bell."

Bell was, fortunately, endowed with a plentiful stock of confidence in the utility of his scheme, and was not discouraged by a short-sighted Government. He experimented with a pleasure-boat, into which he placed a boiler and engine of four horse-power. Subsequently he sought the advice of James Watt as to a portable engine that would stand on its own base, with strong levers, of which he suggested the design. Watt's reply was discouraging. He wrote thus—

"How many noblemen, gentlemen, and engineers have puzzled their brains and spent their thousands of pounds, and none of all these have been able to bring the power of steam in navigation to a successful issue."



MAKER OF THE "COMET'S" ENGINES, JOHN ROBERTSON.

Bell now made overtures to the European Powers, and also to the United States, and so impressed was the Government of the latter with Bell's scheme that they commissioned Robert Fulton, who was in England on their behalf taking drawings of cotton and other machinery, to visit Bell and investigate his claims. He was much with Bell, and Bell's models were those which he adopted when he recrossed the Atlantic. Indeed, the engines of the steam-boat *Clermont*, which plied on the Hudson in 1807, the first American vessel to be propelled by steam, were built, on Bell's suggestion, at the works of Messrs. Bolton and Watt, Birmingham.

On the dispute as to who has the honour of inventing the steam-ship, the Report of the Select Committee of the House of Commons on Steam-Boats,



THE FIRST PRACTICAL STEAM-BOAT TO PLY REGULARLY ON EUROPEAN WATERS: BELL'S "COMET," WHICH WAS LAUNCHED IN 1812.

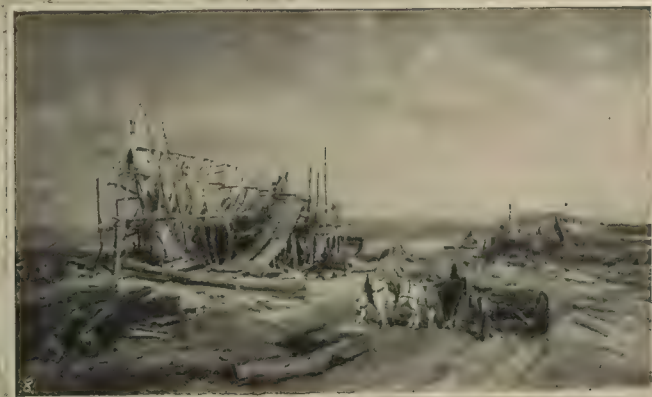
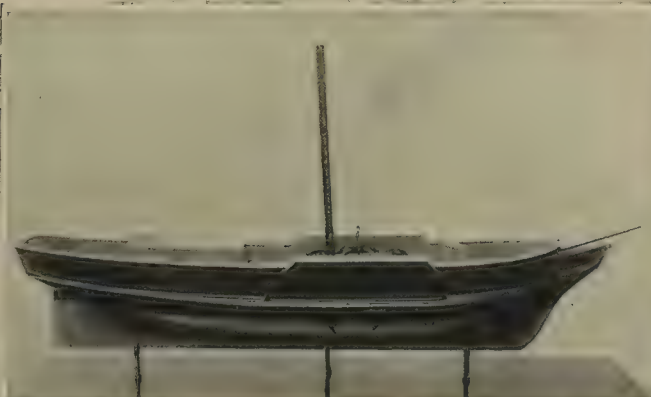
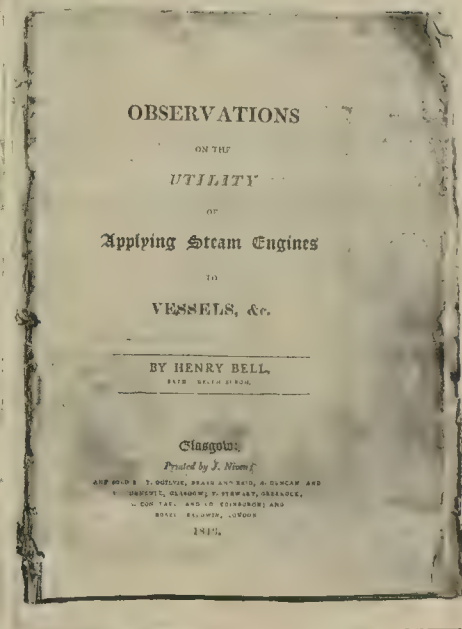
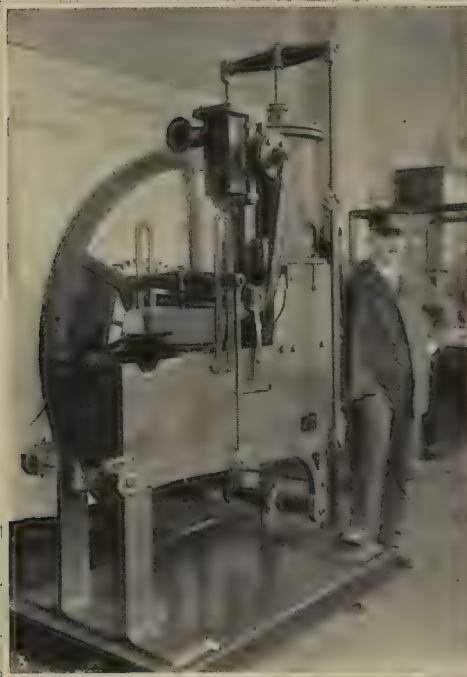
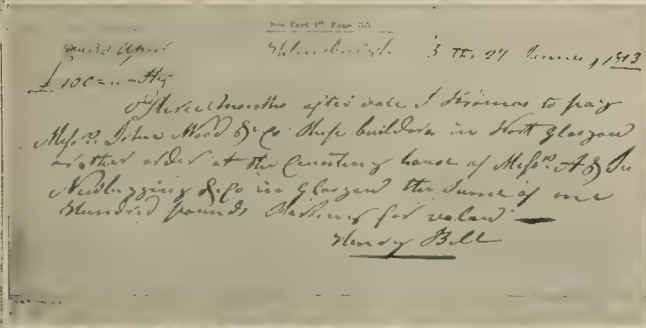
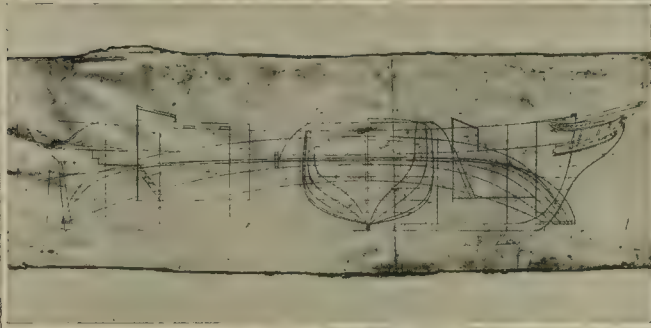
The "Comet" first plied between Greenock and Glasgow, and then extended her sailings—for instance, through the Kyles of Bute to Tarbert, Loch Fyne, thence through the Crinan Canal to Oban and Fort William. Later still, she was transferred to Grangemouth, and then resumed her West Highland voyage.—[DRAWN BY A. FORESTER.]

first *Charlotte Dundas*, Bell had applied to the Lords of the Admiralty for leave to demonstrate to them the practicability and



# FIFTY FEET LONG AND WITH A 3-H.-P. ENGINE: THE STEAM-SHIP "COMET."

PHOTOGRAPHS SPECIALLY TAKEN FOR "THE ILLUSTRATED LONDON NEWS."



1. THE "COMET" PLANNED ON PAPER: THE ORIGINAL SHEER DRAUGHT OF HENRY BELL'S PADDLE-STEAMER.
2. FOR THE BUILDING OF THE "COMET": A PROMISSORY NOTE FROM HENRY BELL TO JOHN WOOD.
3. OF THREE HORSE-POWER: THE ENGINE OF THE "COMET" MADE BY JOHN ROBERTSON.
4. SHOWING "THE 'COMET,' THE FIRST STEAM-BOAT IN BRITAIN": HENRY BELL'S BUSINESS CARD.

With the exception of the "Comet's" engine, which is in South Kensington Museum, everything illustrated on this page is to be seen in the extremely interesting British Steam Navigation Centenary Exhibition in the Kelvingrove Museum, Glasgow. The following notes as to certain of the subjects should be made. The original sheer draught of the "Comet" was presented by Mr. John Wood to Mr. Low, Sawmills, Port-Glasgow, and on his death passed to Mr. Matthew Blackwood. The exhibition contains three promissory notes from Henry Bell—one to Messrs. John Wood and Co. towards the building of the "Comet" and two to David Napier for the boiler. The "Comet's" engine was condensing—of 3 h.-p. The engine-shaft appears to have been of cast-iron and fitted with a fly-wheel. Henry Bell's business card is lent to the

5. FROM THE FIRST STEAMER SEEN ON THE CLYDE: THE BELL AND COMPASS OF THE "COMET."
6. PRINTED IN GLASGOW IN 1813: A PAMPHLET BY HENRY BELL.
7. THE FIRST PASSENGER-CARRYING STEAMER ON THE CLYDE: A MODEL OF THE FIFTY-FOOT LONG "COMET."
8. WHERE THE "COMET" WAS BUILT: JOHN WOOD'S YARD, PORT-GLASGOW.

exhibition by Mr. John Wilson, of 83, Jamaica Street, Glasgow. The bell and the compass of the "Comet" are the property of the Corporation. The "Comet" had an over-all length of 50 feet, a breadth of 11 feet, and a depth of 5 feet 6 inches. The paddles were simply four blades fixed on arms, two on each side of the boat. These not being satisfactory a single pair was substituted, the hull was lengthened, and a new engine put in. "The engine of the 'Comet' was at first about 3 horse-power. The cylinder was placed vertically, the piston-rod had a cross-head from which depended two side rods which were connected to a lever below, from which motion was given to the connecting rod and crank. A large fly-wheel was added to steady the motion, and toothed wheels connected the engine-shaft with the paddles."



published in 1822, sums up the various claims to that distinction. It states—

"Mr. Jonathan Hulls, in 1736; the Duke of Bridgewater, in the Manchester and Runcorn Canal; Mr. Miller, of Dalswinton; the Marquis of Jouffroy, a French nobleman, in 1781; Lord Stanhope, in 1795; and Messrs. Symington and Taylor, on the Forth and Clyde Canal, in 1801-2; these ingenious men made valuable experiments and tested well the mighty power of steam. Still no practical uses resulted from any of these attempts. It was not till the year 1807, when the Americans began to use steam-boats on their rivers, that their safety and utility was first proved. But the merit of constructing these boats is due to the natives of Great Britain. Mr. Henry Bell, of Glasgow, gave the first model of them to the late Mr. Fulton, of America, and corresponded regularly with Fulton on the subject. Mr. Bell continued to turn his talents to the improving of steam apparatus and its application to various manufactures around about Glasgow, and, in 1811, constructed the *Comet* steam-boat (the first of its kind in Europe) to navigate the Clyde from Glasgow to Port Glasgow, Greenock, Helensburgh and Inverness."

About 1807, Bell had a definite conception of the style of engines he desired for propelling

engine was of the condensing type of three horse-power, the cylinder 11½ in. diameter, and the stroke 16 in. She was originally fitted with two pairs of paddle-wheels, 7 ft. in diameter. The preliminary trials of the vessel proved a failure

Canal. After a short time on this route she was transferred to Grangemouth, but in August 1819 she reappeared on the West Coast and resumed her West Highland voyages.

On Dec. 19, 1820, the *Comet*, on a voyage from Oban to Glasgow, was wrecked outside Crinan, the crew and passengers fortunately being able to scramble ashore. When the *Comet* was wrecked, Bell was on board, and on his way to Glasgow to arrange for the building of a larger vessel; and in 1821 the second *Comet* was built by James Lang, of Dumbarton. She also traded in the West Highlands for a few years, but her career was shorter than that of her predecessor, as on Oct. 21, 1825, she collided with the steamer *Ayr*, off Gourock, seventy of the passengers being drowned.

Bell derived no benefit from his first venture, and the loss of the second *Comet* brought him financial disaster. He was never in a position to pay in full either the builder or the maker of the engine of the first *Comet*,

but, with great generosity, Wood did not press for a settlement. The Government were approached on several occasions to grant Bell a pension as a



AS SHOWN IN AN OLD PRINT: THE "COMET" AS SHE WAS IN 1812, THE YEAR OF HER LAUNCH.

owing to one pair of paddle-wheels working in the wash of the other, and causing a loss of power. One pair of the paddles was removed, and another engine of four horse-power substituted, having a cylinder of 12½ in.

The *Comet's* first voyage was from Greenock to Glasgow, on Aug. 6, 1812, the distance of twenty-two miles being covered in 3½ hours. After plying on the Clyde for a month, her sailings were extended, as we find that she sailed through the Kyles of Bute to Tarbert, Loch Fyne, thence through the Crinan

Canal to Oban and Fort William, the return journey occupying four days. The *Comet* was, therefore, the first steamer to use the Crinan

reward for his inestimable services, but without avail. After much solicitation, they granted him the paltry sum of £200. The Clyde Trustees, how-



THE FIRST PRACTICAL STEAM-BOAT, AND A SHIP OF TO-DAY: THE "COMET"; AND THE "COLUMBA," WHICH PLIES ON THE FIRTH OF CLYDE.

a vessel. A year or two later he was in communication with the brothers John and Charles Wood, shipbuilders, Port Glasgow, and eventually commissioned John Wood to build a vessel for him at his yard, Port Glasgow. The engines were made by John Robertson, engineer, Glasgow, and the boiler by David Napier.

The date of the launch, on the authority of a list supplied by the builders, and contained in a Parliamentary Report of 1822, is July 24, 1812. The vessel was launched practically complete with steam up, and was named the *Comet*, after a meteor which appeared in the heavens some time previously. Built of wood, she was 43 ft. 6 in. long; 11 ft. 4 in. broad; 5 ft. 9 in. deep, with a draught of 4 ft. She carried a large square sail, which was brought into use when the weather was favourable. The



ERECTED IN 1838 AS A MEMORIAL TO THE "COMET'S" OWNER: THE HENRY BELL MONUMENT AT DUGLASS POINT.



THE END OF THE SECOND "COMET": THE WRECK OF THE STEAM-BOAT ON THE SHORE AT GOUROCK. The first "Comet," which traded by "the power of wind, air, and steam," was wrecked outside Crinan in 1820, while on her way from Oban to Glasgow. No lives were lost. The second "Comet," built in 1821, was lost by collision off Gourock in 1825. Seventy of the passengers were drowned.

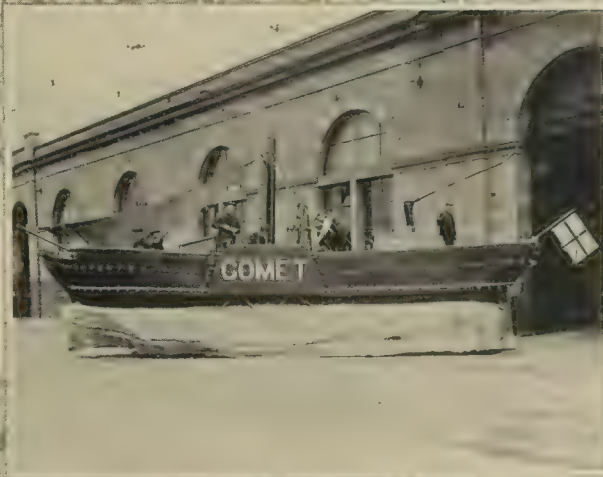
ever, came to his aid, and, greatly to their credit, they first allowed him £50 per annum, which they shortly afterwards increased to £100 per annum, during his life, and graciously continued to his widow.

Henry Bell died at Helensburgh on Nov. 14, 1830, having lived for eighteen years after the birth of his famous *Comet*, to see the evolution of the result of his genius and perseverance. To his memory in his native village of Torphichen Mill there is a handsome tablet, and at Duglass Castle, where the estuary of the Clyde widens out into a panorama of Highland loch and mountain, a noble obelisk has been reared; but the grandest memorial to the genius of Henry Bell is the modern steam-ship.



# THE CENTENARY OF THE "COMET": THE GLASGOW CELEBRATIONS.

PHOTOGRAPHS BY TOPICAL, ILLUSTRATIONS BUREAU, AND NEWS ILLUS.



1. DECORATED FOR THE CENTENARY OF THE LAUNCH OF THE "COMET": THE HENRY BELL OBELISK AT HELENSBURGH AS IT WAS DURING THE FESTIVITIES.
3. DRESSED FOR THE CENTENARY: THE LINER "GRAMPIAN" ON HER WAY DOWN THE CLYDE EN ROUTE FOR CANADA.
5. KEENLY INTERESTED IN THE CENTENARY: PROVOST JAMES FISHER, OF ROTHESAY, ORIGINATOR OF THE CELEBRATIONS, AND BAILIE JAMES McMILLAN, OF ROTHESAY.

The programme of Glasgow's celebration of the centenary of the launch of Henry Bell's steamer, the "Comet," included the running of illuminated cars; a luncheon in the City Chambers; and an excursion to the Tail of the Bank to see the display of shipping, which included war-vessels, merchant-vessels, yachts and other craft. The whole affair was a great success and reflected much credit upon the organisers. In connection with the event, there is an excellent exhibition, in Kelvingrove Museum, illustrating the history and development of steam navigation. The collection includes: (1) Models of early experimental Steam-

2. THE SECRETARY FOR SCOTLAND AND THE LORD PROVOST OF GLASGOW: MR. M'KINNON WOOD AND MR. D. M. STEVENSON AT THE CELEBRATIONS
4. REPRESENTING THE "COMET": A CORPORATION CAR IN THE GUISE IN WHICH IT RAN THROUGH GLASGOW AT NIGHT, ILLUMINATED
6. DESCENDANTS OF HENRY BELL: MR. HENRY BELL LOWE AND MR. PETER BELL LOWE GREAT-GRANDNEPHEWS; MR. H. B. MACPHAIL AND MR. J. M. MACPHAIL GRANDSONS

propelled Vessels; (2) Models of the earliest Steam-Vessels which plied commercially; (3) Models illustrating the progress of Steamship building in Tonsage, Power, and Speed; (4) Illustrations of the development and variations of Marine Engines, including Turbines and other Motors and Marine Boilers; (5) Illustrations of history of Steam Power as applied to War-Vessels; (6) The development of Ocean Steamship Navigation; (7) Auxiliary Appliances connected with Marine Engines; (8) Pictures, Engravings, and Drawings relating to Steam Navigation and Naval Engineering; (9) Portraits and Personal Relics of Inventors and others.



# THE CENTENARY OF THE LAUNCH OF THE STEAMER "COMET," AT GLASGOW:

PROMINENT ORGANISERS OF THE REJOICINGS IN HONOUR OF HENRY BELL'S ENTERPRISE.



## CELEBRATING THE CENTENARY OF STEAM NAVIGATION ON THE CLYDE: MEMBERS OF THE EXECUTIVE COMMITTEE AND OTHERS.

The members of the Executive Committee of the "Comet" Centenary at Glasgow shown above are: Bailie James Stewart, River-Bailie Gardiner, Councillors George Carson, Thomas Dunlop, Robert Hunter, Bruce Murray, Andrew Macdonald, and Edward Watson; the Rev. Robert Barr, of Renfrewshire County Council; Provosts John Taylor, of Clydebank; McKechnie, of Govan; McMillan, of Greenock; A. M. M. G. Kidston, of Helensburgh; Councillor Robert Johnston, of Partick; Provosts William Fyfe, of Port-Glasgow; W. F. Anderson, of Renfrew; Fisher, of Rotheray (originator of the celebrations); Maguire, of Duntoon; Mr. Francis Henderson (Dean of Guild), of Glasgow Merchants House; Mr. A. G. Service (Deacon Convener), of Glasgow Trades House; Mr. E. Hall-Brown (President), of the Institution of Engineers and Shipbuilders of Scotland; Dr. A. L. Mellanby and Mr. H. F. Stockdale (Secretary), of Glasgow Technical College; Professors A. Barr and J. H. Biles, of Glasgow University; Captain J. C. Black, of the Mercantile Marine Service

Association: Mr. Walter Dixon, President of the West of Scotland Iron and Steel Institute; Colonel John M. Denny, of Dumbarton; Mr. Alexander Gracie, of the Fairfield Shipbuilding Co., Govan; Mr. John Hamilton, of W. Beardmore and Co., Dalmuir; Mr. Thomas Bell, of John Brown and Co., Clydebank; Mr. W. G. Sharp, of the Boilermakers' Iron and Steel Shipbuilders' Society; Mr. T. H. Hill, of the Ship Constructive and Shipwrights' Association; Mr. Robert Neilson, of the Amalgamated Society of Engineers; and Mr. G. F. S. Shanks and Mr. George Laidlaw, of the Glasgow Trades Council. Portraits also appear on this page of Mr. John Inglis, LL.D., of the Committee of Clyde Navigation Trustees on Shipping Display; Councillor James Steele, Convener of the Museums and Art Galleries Sub-Committee; Mr. James Paton, Curator of Art Galleries and Museums; Mr. John S. Samuel, Private Secretary to the Lord Provost of Glasgow; and Mr. D. M. MacIntyre, Assistant to the General Manager and Secretary of the Clyde Navigation Trust.

Photographs (the majority) by Laing & Co., Glasgow; others by Maitland and Fox, H. W. Jones, Turnbull and Mainw, Hunter, Paterson, Annan and Sons, W. D. Brown, Whyte and Sons, Mitchell, Warnock, Sharp, Kailson, Ivy Photo Co., and Colin Ramsay.



# THE "COMET" CENTENARY: PIONEERS OF STEAM NAVIGATION:

AND MEMBERS OF THE HONORARY ADVISORY COMMITTEE OF THE CENTENARY EXHIBITION.



1. FOUNDER OF THE FIRST PASSENGER STEAM-BOAT SERVICE ON THE CLYDE; HENRY BELL.

3. AN EDINBURGH BANKER WHO SPENT A FORTUNE ON EXPERIMENTS WITH STEAM-BOATS; PATRICK MILLER.

Patrick Miller and William Symington, in 1788, tried a small steam-boat on Dalswinton Loch, and a larger vessel in the following year on the Forth and Clyde Canal. In 1802, on the same canal, appeared Symington's "Charlotte Dundas." Patrick Miller, of Dalswinton (1731-1815), was a friend and landlord of Robert Burns. William Symington (1764-1831), who was an engineer, was eventually ruined by his experiments with steam-boats, and died in poverty. James Watt at first discouraged the use of steam on ships, but, later, his firm—Boulton and Watt, of Birmingham—built the engines for Robert Fulton's "Clermont," placed on the Hudson in 1807. Henry Bell (1767-1830), of Helensburgh, was the pioneer of

2. DESIGNER OF THE "CHARLOTTE DUNDAS" IN 1801 AND EARLIER STEAM-BOATS; WILLIAM SYMINGTON.

4. THE FATHER OF THE STEAM-ENGINE, WHO AT FIRST DISCOURAGED HENRY BELL FROM APPLYING IT TO SHIPS; JAMES WATT.

passenger steam-boats on the Clyde. His first "Comet" was launched on July 24, 1812. Round the border of this page are portraits of members of the Honorary Advisory Committee of the Centenary Exhibition—namely, Colonel Walter Brown, of the firm of William Simons and Co., Ltd.; Mr. Archibald Denny, of William Denny and Brothers; Mr. James Gilchrist, of Barclay, Curle, and Co., Ltd.; Mr. James R. Jack, M.I.N.A., of the Royal Technical College, Glasgow; Mr. Henry A. Mavor, M.I.C.E., of Mavor and Coulson, Ltd.; Mr. Edward H. Parker, Secretary of the Institution of Engineers and Shipbuilders in Scotland; Mr. John R. Richmond, of G. and J. Weir, Ltd.; and Mr. William Young, R.S.W., of Hillhead.

Portraits specially photographed by "The Illustrated London News": Photographs in the Border by Lafayette, Glasgow; and Mellrich, Paisley.



## A GREAT ENTERPRISE: THE RIVER CLYDE &amp; THE PORT OF GLASGOW



CHAIRMAN OF THE CLYDE NAVIGATION TRUST: SIR THOMAS MASON, J.P., D.L.

Engraving by Lafavette.

IN Scotland there are no great rivers formed by the hand of Nature. In it, however, fervour is a characteristic, and where Nature has been illiberal in the making of streams she has been liberal in the endowing of men with intellect and determination.

The river Clyde was, one hundred years ago, a "thing of beauty," but the commercial spirit of the city decreed that it was not to be a "joy for ever." In the beginning of last century there was at the Broomielaw one little quay, which haven was more often desired than attained, as small craft drawing two or three feet of water could only reach it through much tribulation. One hundred years of swiftly flowing time, and the scene is changed! The quays, then a



HEADQUARTERS OF A GREAT ENTERPRISE: THE CLYDE NAVIGATION TRUST CHAMBERS.

the famous James Watt. In 1781, Golborne reported again; in 1799, John Rennie was consulted; and in 1806, Thomas Telford; and, on the advice of those eminent engineers, further schemes of improvement were adopted. Their efforts in the training of the river by walls and jetties were so successful that in 1806 a vessel of 120 tons, drawing 8½ feet, reached Glasgow. The history of the navigation since has been one of unbroken prosperity, and the earnest work of the citizens and their advisers has been of incalculable value not only to Glasgow but to the trade of the world.

The affairs of the River and Port were managed by the Municipality until the beginning of last century, when the



GENERAL MANAGER AND SECRETARY OF THE CLYDE NAVIGATION TRUST: MR. T. R. MACKENZIE.

Photograph by Annan



SHOWING THE FINER CLYDE TRUST OFFICES, THE EAST END OF GLASGOW'S GREAT HARBOUR.

few yards in length, are now eleven miles in extent, with deeply founded and solid walls, at which keels scarcely find bottom at forty feet, and from which a vessel may safely leave for sea with 12,000 tons of the products of industry.

The Municipality of Glasgow were the pioneers in the improvement of the Clyde from Glasgow to the sea. In the beginning of the seventeenth century a few small vessels traded to Glasgow, but could not come nearer than Dumbuck—fourteen miles seawards. The river was narrow and tortuous, with several islands, and so shallow as to be in many places fordable. The methods adopted to clear the channel by means of such little money as was at the disposal of the Municipality were of the most primitive kind, and it was not until 1663 that any attempt was made to build a quay, which was so diminutive that the work was faced with timber from the "High Kirk or back gallery." The trade and requirements of the city, however, developed so rapidly that it was found necessary to seek some place below Dumbuck for the loading and unloading of goods, and in 1608 lands were acquired at Newark, eighteen miles from Glasgow, on which there was a small private harbour, and this harbour, with additions, came to be known as Port Glasgow. Here the principal trade of the Port was carried on.

Union with England, the Colonies were opened up to commerce, when there was a considerable trade with Virginia. A vessel of sixty tons was built on the Clyde in 1718, which commenced the trade in tobacco for which Glasgow became famous; and the ensuing rapid development resulted in the Town Council, in the year 1722, proceeding with the construction of another quay near Glasgow Bridge.

In 1755, Smeaton, the engineer of the Eddystone Lighthouse, reported on the river, and following thereon the first Act of Parliament was obtained in 1759 for improving the navigation. In 1768, John



"GLASGOW MADE THE CLYDE, AND THE CLYDE MADE GLASGOW" IN THE HARBOUR.

Council was formed, under an Act of Parliament passed in 1809, into a separate body as statutory trustees. They were empowered to convey to themselves the dues authorised to be levied, and also the quay and harbour itself, and to take over the responsibility of deepening and widening the river for the eighteen miles between Glasgow and the Firth, and of maintaining and improving the harbour. Since then various changes have been made in the Constitution. The number of "The Trustees of the Clyde Navigation" is now forty-two, ten being chosen by the Municipality, two each by the Chamber of Commerce, Merchants' House, and Trades' House of Glasgow, eight by the Counties and small towns on the river, and eighteen by the harbour-dues payers.

The improving of the river is carried on constantly, and for this purpose the Trustees have dredgers capable of dredging in forty-eight feet of water and cutting their own flotation, and a large fleet of hopper barges for conveying the excavated materials to sea. The quays, which are, for the most part, solid walls founded on concrete caissons, are equipped with sheds varying from 60 to 100 feet wide, with lines connecting with the principal railway systems of the country. Besides the quays on the open river, there are four tidal basins, viz.; Kingston Dock, Queen's Dock, Prince's Dock,



AS IT WAS IN THE YEAR OF THE LAUNCHING OF THE "COMET," THE FIRST STEAM-BOAT ON THE CLYDE, GLASGOW HARBOUR IN 1812.

Golborne, of Chester, reported that the river was in a state of nature, and a year later, a report was got from

Besides the



SIGNS OF PROSPERITY: VESSELS IN THE SOUTH BASIN OF ROTHERSEY DOCK.



VIEWS FROM THE ENTRANCE: QUEEN'S DOCK, A CENTRE OF MUCH COMMERCE.





WITH A WATER AREA OF 35 ACRES, PRINCE'S DOCK, OPENED IN 1897 BY THE THEN DUKE AND DUCHESS OF YORK.

and Rothesay Dock, which comprise fully one-half of the whole quayage. The docks are available at all states of the tide, the range being only about ten feet. Rothesay Dock, with over a mile of quayage, chiefly for the ore and coal trade, is equipped with modern appliances entirely wrought by electricity, and in this respect is the only dock of its kind in the country. There are three graving docks: one 880 feet long; and the Trustees are about to construct another of such dimensions as will accommodate any vessel in H.M. Navy or in the Merchant Service, and will probably be the largest in the world. The

requirements of the deep-draughted vessels of today; as steamers drawing twenty-eight feet may leave the quays two hours before high-water and reach the sea in one tide.

The huge steamers built on the Clyde have also to get to deep water. From the yard which bore the *Lusitania* will shortly be launched the Cunarder *Aquilania*, which will be over 900 feet long. The most powerful war-ships are launched safely from those

and Steel, and Machinery, 859,905 tons; and Imports—Corn, Wheat, Flour, etc., 545,087 tons; Ores, Pig-Iron, and Limestone, 1,896,714 tons; Timber, 234,168 tons; and Fruits, 90,138 tons. Of the whole tonnage the exports form 60 per cent., and the foreign trade, 70 per cent.

In 1812 the Revenue from the dues of the Port was only £4600. Fifty years later, it was £111,000, and since then it has steadily increased until, for the year ended June 30 last, despite losses through labour troubles, it amounted to over £582,000. Fifty years ago the quayage did not extend more than two miles, and there was not a single



Photo. Warnock.

DEPUTY CHAIRMAN OF THE TRUSTEES OF THE CLYDE NAVIGATION TRUST MR. W. H. RAE BURN.

Trustees are constructing a granary of the most modern kind to contain 31,000 tons of grain, with elevators and other appliances wrought by electricity for the rapid handling and the storage of grain.

In addition to special berths for the lines of steamers trading to all parts of the world, there is ample berthage for tramp steamers with grain, timber, and ore, and for the shipment of coal, iron, and the great variety of other goods, as well as facilities for fitting out merchant and war vessels. The Trustees have been unremitting in their efforts, not only to provide for the rapid handling of cargoes, but also to meet



Photo. Lewis.

AS IT IS IN 1912, THE YEAR OF THE CELEBRATION OF THE CENTENARY OF THE "COMET'S" FIRST JOURNEY ON THE RIVER; THE CLYDE, VIEWED FROM THE SAILORS' HOME, GLASGOW.

famous ship-building yards, and lie afloat at all states of the tide.

The Trustees have spent in forming the river and harbour about ten millions sterling, seven of which have been borrowed, and the annual expenditure for maintenance and interest at present is over £500,000.

Glasgow is pre-eminently a manufacturing centre, and is surrounded by coalfields and ironworks. Of the articles of commerce dealt with annually at the Port the following are the principal; Exports—Coal, 4,107,427 tons; Iron

6,920,566; this year it was 12,220,538. The tonnage of goods was 4,896,817; now it is 9,524,662.

Much expense has been avoided by the foresight of the Clyde Trustees, as lands for dock purposes have been acquired at moderate prices; and they now possess 400 acres near Glasgow, having two miles of river frontage, on which will be formed not only the mammoth graving dock, but about six miles of quayage. The Trustees have always enjoyed public confidence, the splendid Port of to-day being eloquent of the wisdom of their management.



IN 1812, ONE LITTLE QUAY AT THE BROOMIELAW; IN 1912, ELEVEN MILES OF QUAYS, IN GLASGOW'S BUSY HARBOUR.



# HONOURING THE DESIGNER OF THAT "SPLUTTERIN' THING," THE "COMET": THE CENTENARY CELEBRATIONS ON THE CLYDE.

DRAWN BY CHARLES J. DE LACY, OUR SPECIAL ARTIST ON THE "COLUMBA."



## GLASGOW'S RECOGNITION OF HENRY BELL, THE MAN WHO LAUNCHED THE FIRST STEAM-SHIP UPON WATERS NOW WORLD-FAMOUS: THE SHIPPING DISPLAY AT THE TAIL OF THE BANK.

When an old "skipper" first saw the "Comet" on the Clyde he piped the whole of his ship's company—a man and a boy—on deck and said to them: "Kneel doon and thank God that ye sail with the Almichty's ain wind, and no' wi' the De'il's ain fire and brimstone like that splutterin' thing there." That was a hundred years ago. Last week Glasgow honoured Henry Bell, who was responsible for the "splutterin' thing," by keeping the centenary of the launch of the "Comet" with great rejoicings. August 31 was a general holiday in the Towns of the Clyde, and there was a very interesting display of shipping off the Tail of the Bank. To view this display the Royal Mail steamer "Columba," which had been placed at the disposal of the Centenary Executive Committee, set out at noon on a voyage of inspection with a distinguished company numbering several hundred. The trip was a striking revelation of the vast extent and scope of the Clyde shipbuilding industry, for every

conceivable type of steam-ship was seen in the making, from great war-ships and liners down to little tugs and river craft. For instance, to mention only war-ships, at Messrs. Harland and Wolff's Yard at Govan were the Australian cruiser "Sydney," the Admiralty depot-ship "Woolwich," and three destroyers; in the Fairfield Company's yard the cruiser "New Zealand" and five destroyers; at Messrs. John Brown's yard at Clydebank the cruisers "Southampton," "Tiger," and "Australia," and several destroyers; at Messrs. W. Beardmore's yard the battle-ships "Conqueror" and "Benbow," the cruiser "Dublin," and two destroyers; and at Messrs. Yarrow's yard at Scotstoun more destroyers and three gun-boats. In the illustration are—on the left a liner, and then, from left to right, the flag-ship "Hercules," the "Colossus," the "Monarch," and the "Neptune"; in the right foreground is the "Columba."



## THE ROMANCE OF A GREAT TRANSATLANTIC LINE.



CHAIRMAN OF THE ALLAN LINE STEAMSHIP COMPANY: MR. HUGH A. ALLAN.

Mr. Hugh A. Allan is the son of the late Mr. Andrew Allan, partner with his brother, the late Sir Hugh Allan, in Montreal. Mr. H. A. Allan is also a Director of the Grand Trunk Pacific. (Photo, by Lafayette.)

engaged in conveying supplies to Spain for the Duke's forces. Her commander was Captain Alexander Allan, a young Scot, a native of Saltcoats, Ayrshire, who had early in life taken to a seafaring career, and had risen in the service by his own ability. The war being over, Captain Allan cast about for some new employment, and eventually, in 1810, built at Irvine the brigantine *Jean*, and the same year set sail in her from Greenock for Quebec with a view to opening up trade with Canada—then just beginning to attract the more adventurous spirits in the world of commercial enterprise. The first voyage of the *Jean* to Canada proved very successful, and the trade was so profitable that Captain Allan established a regular service of four large clipper packets, himself taking command of the *Favorite*.

Thus was inaugurated the service which developed into the famous Allan Line, the oldest of the North Atlantic steamship companies running to Canada. At that time the navigation of the St. Lawrence, always difficult, was far more formidable than it is now, for the channel was badly lighted, and the pilots were frequently incompetent. There were no wharves then at Montreal: vessels had to be towed up St. Mary's Current by oxen, and cargoes unloaded by means of planks from the ships to the shore.

The perils and hardships of those days are described in a little booklet called "A Short History of a Great Steamship Company," written a year or two ago, by Mr. Randolph Carlyle. "Anyone," he writes, "however lacking in imagination, could form at least a moderate idea of what it meant for Captain Allan to surmount in his day, with his fragile wooden vessels, the same winds, the same ice-floes, and the same rocky coasts that in this twentieth century, against all the advantages of advanced engineering skill, sometimes make prey of the great leviathans of the deep." These words sound almost prophetic in the light of the disaster to the *Titanic*, and in that connection it may be recalled that two modern Allan liners—the *Virginian* and the *Parisian*—were among the vessels which caught the

TWO years before the Battle of Waterloo, when the Duke of Wellington was campaigning in the Peninsula, a trim little brig named the *Hero* was engaged in conveying supplies to Spain for the Duke's forces.

five sons, the eldest of whom, James Allan, and another, Bryce Allan, commanded ships of their father's fleet. James and his brother Alexander succeeded to their father's business in Glasgow under the style of Messrs. J. and A. Allan. Captain Bryce Allan settled at Liverpool, where he was agent of the line for twenty years. Meanwhile, the second son, Hugh—afterwards so well known throughout Canada as Sir Hugh Allan—who was born at Saltcoats in 1810, had, as a boy of fifteen, sailed with his father in the *Favorite* to Montreal, landing there in May 1826. A few years later he became a partner in the firm of Millar, Edmonstone and Co., of Montreal, as also did his brother Andrew; and in 1860, when Mr. Edmonstone retired, the firm took

small—from 350 to 450 tons—but fast, and specially built on the Clyde for coping with the spring ice in Canadian waters. It was in 1852, a memorable year in the history of the firm, that sailing vessels were superseded by a service of iron-screw steamships. The Atlantic and St. Lawrence Railway, from Montreal to Portland, had just been completed, and Hugh Allan saw that their

MANAGING DIRECTOR OF THE ALLAN LINE AT GLASGOW: COLONEL JAMES SMITH PARK, M.V.O.

Colonel James Smith Park is also principal owner and manager of the Park Steamship Company, Ltd., and Chairman of the Dominion of Canada Investment and Debenture Company, Ltd. (Photo, by Lafayette.)

vessels could call at Portland in winter to connect with the new railway. Accordingly, the Allans and some other merchants formed the Montreal Ocean Steamship Company, and a contract was placed with William Denny, of Dumbarton, to build two iron steamers, the *Canadian* and the *Indian*.

These vessels had a gross tonnage of about 1700 tons, with engines of 350 horse-power; they were barque-rigged, and cost some 250,000 dollars each; their speed was about eleven knots. These new boats were used as military transports during the Crimean War. In 1855 the Canadian Government made a contract with the Allans for the fortnightly conveyance of the mails, giving them a subsidy of 120,000 dollars a year, afterwards increased to 208,000 dollars, and later to double that sum for a weekly service. This naturally gave a great impetus to the line, and a number of new and improved steamers were built.

At first there were serious losses amongst the steamers running to the St. Lawrence, and insurance premiums became prohibitive. The Allans, however, did not despair, and eventually fortune turned, and for thirty-three years they lost only one ship, and that without loss of life. A memorable event in the evolution of the line was the introduction of turbine-engines in 1904, the first two boats thus fitted being the *Victorian* and the *Virginian*, each of 12,000 gross tonnage. The Allans were pioneers in putting the turbine theory into practice in ocean-going vessels. They were also the first to build an ocean steamer of steel, namely, the *Buenos Ayres*, in 1881, and the first Transatlantic line to adopt bilge keels, in 1884, on the *Parisian*. The latest Allan liners are among the most comfortable passenger-vessels afloat. The firm is ever progressing, and a new addition to their large fleet, the *Alsatian* (illustrated on this page),



THE LATEST ADDITION TO THE ALLAN LINE: THE "ALSATIAN," AS SHE WILL BE WHEN COMPLETED IN THE SPRING OF 1913.

The "Alsatian," 600 feet long, 17,000 tons, and 18-knot speed, is now being built for the Allan Line by Messrs. W. Beardmore and Co., at Dalmuir. (From a Drawing by J. Ross Melville.)

its present name, that of Messrs. Hugh and Andrew Allan. Thus, of the five sons of Captain Alexander Allan, the founder, three were in the old country and two in the new, all being concerned in the growing interests of the Allan Line. The quintet of brothers continued to manage the great business for forty years. The most prominent of all, Hugh Allan, was knighted by Queen Victoria, in 1871, for his services to Canadian commerce. A similar honour was afterwards conferred by King Edward on Sir Hugh's son, the present Sir H. Montagu Allan. He and his brother, Mr. Bryce J. Allan, and their cousins, Messrs.



THE FIRST STEAM-SHIP OF THE ALLAN LINE: THE "CANADIAN," WHICH, WITH HER SISTER-SHIP THE "INDIAN," WAS PUT INTO SERVICE IN 1853.

The "Canadian" was a vessel of 1700 tons (gross). Her dimensions were about 270 ft. by 34 ft. She carried a large cargo and about eighty first-class passengers, with emigrants in the steerage.

*Titanic's* wireless cry of distress, and immediately hastened to her aid, but were, unfortunately, too far away to be able to reach her in time.

To revert to early days—Captain Alexander Allan continued to command the *Favorite* until 1831, when he set up an office in Glasgow to promote the Canadian trade. He had

Hugh A. Allan and Andrew A. Allan, sons of Mr. Andrew Allan, succeeded to the management when the elder generation passed away.

The shipbuilding as well as the personal side of the story of the Allan Line is also of remarkable interest. The first vessels were, of course, sailing-ships. They were



THE PIONEER VESSEL OF THE ALLAN LINE: THE BRIGANTINE "JEAN," IN WHICH CAPTAIN ALEXANDER ALLAN MADE HIS FIRST VOYAGE TO CANADA IN 1819.

The "Jean" was a little sailing-vessel of 169 tons. Her length was 76 ft. Captain Alexander Allan, the founder of the line, sailed in her from Greenock to Quebec in 1819.

is now being built by Messrs. W. Beardmore, at Dalmuir, and a duplicate steamer, the *Calgarian*, by the Fairfield Company, at Govan. In September 1909, the Canadian Allans bought out all the British shareholders save Colonel Smith Park, and have since carried on the line, with even greater success than in the past.



## THE SCIENTIFIC ROAD TO SEAMANSHIP: STUDY ON ROOF AND IN ROOM.

PHOTOGRAPHS SPECIALLY TAKEN FOR "THE ILLUSTRATED LONDON NEWS."



Learning how to Adjust a Ship's Compass for the Various Magnetic Forces Generated in the Steel Hull of a Vessel: Students Using the Deviascope, on the Roof.



Learning the "Rules of the Road": Future Officers in the Mercantile Marine Studying their Profession with the Aid of Models and Special Compass.

### FUTURE OFFICERS IN THE MERCANTILE MARINE LEARNING THEIR PROFESSION: CLASSES AT THE SCHOOL OF NAVIGATION OF THE ROYAL TECHNICAL COLLEGE, GLASGOW.

The photographs show future officers in the Mercantile Marine at work in the splendidly equipped and managed School of Navigation at Glasgow, which is fortunate in possessing several original and unique pieces of apparatus, in addition to those which are customary. Notable amongst the novelties is a large Deviascope mounted on the roof. This instrument, which consists of a revolving platform, mounted on a central axis, and operated by a steering-wheel and gearing, is designed for experimental work in adjusting a ship's compass for the various magnetic forces which are generated in the steel hull of a ship. The compass, which

is the pattern designed by the late Lord Kelvin, who did more than any other scientist to simplify the practical work of navigating a ship, commands a complete sweep of the sky-line, which is an essential condition in accurately gauging the variable errors that affect the direction of the needle. The several fittings near the compass are of gun-metal, to eliminate as much as possible the erratic effects of extraneous metal, and to admit of delicate experiments being made. The students stand on the platform and are carried round with it as it revolves, so that the operation of "swinging ship" is made as nearly practical as is possible on shore.





THE HON. THE LORD PROVOST OF GLASGOW, MR. D. M. STEVENSON.

Mano; in the twelfth its See was re-established, and a Cathedral was consecrated in it; in the fifteenth its University was founded; in the latter part of the seventeenth it had gained recognition as of great commercial importance; at the time of the Union it had thirteen thousand inhabitants; in 1779, the Clyde was taken so, to say in hand, in

## THE SECOND CITY OF THE UNITED KINGDOM: GLASGOW.



CONTAINING NEARLY TWO HUNDRED THOUSAND VOLUMES. THE MITCHELL FREE LIBRARY, IN NORTH STREET.

to the bridge of Glasgow. A hundred years ago its people saw the first passenger-carrying steamer pull through her maiden journey on their river, and were interested suitably, but certainly were not vastly elated.

Since then Glasgow has made the Clyde and the Clyde has made Glasgow. And now the descendants of those who now live into his own have just celebrated the advent of the Canal a few months after having found themselves once again dwellers in the second city of the United Kingdom in respect to population, units of 2,000,000, as compared with the 849,172 of Birmingham, and the 726,000 of Liverpool. For this proud position they have to thank the situation of the city, the ability of their forebears and themselves, and the enterprise that has distinguished them and is made evident through their representatives, the Civic Fathers, who, as at present constituted, follow fine traditions with due respect, yet are ever ready to launch out and steer the craft of knowledge or of trade on new waters. Much is entrusted to them. They realise it, and do not shrink the duties it brings. Their city and its concerns are ever before them. They, in company with the Clyde Fraters and other bodies, were responsible for the celebration which have just aroused so much interest on all sides and fostered the necessary fuel. But that festival, after all, was comparatively a minor matter, save historically, a pageant of thanksgiving for prosperity, and an outward and visible sign of that excellent state.

It is to the scholastic and commercial aims they control that chief homage must be paid; and it is well to note, in this connection, that the undertakings for which the Municipality is responsible is exceptionally a basis that taxation rest on no sound basis. To this fortunate state of things the profits of the splendid tramway system, and of the electricity gas, and water supplies, contribute largely. As pioneers, the Corporation gave Glasgow its first tramway in 1857; in 1860 it took over the works of the Glasgow Gas Light Company, which in 1868 first supplied the city with gas, and those of the City and Suburban Gas

Company, which began operations in 1847; in 1860 it commenced to supply electricity; water fit to be drunk officially in 1865, and constructed new works for tapping Loch Fyne, in the Perthshire Highlands, thirty-four and a half miles from Glasgow Bridge. Now it is responsible also for art galleries and museums, public parks, libraries, hospitals, baths and wash-houses, quays, farms, markets, slaughter-houses, foreign animals' wharves, and all those

WHERE YOUTH DEDICATED TO MEDICAL STUDY, THE ROYAL TERN, MEDICAL CHURCH, GLASGOW.

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the



HEADQUARTERS OF GREAT AND FAR-REACHING CITY.

immense other items which go to the composition of a great and growing city. This, of course, to say nothing of the care of public health, of cleansing, of city improvements, of drainage, and many other things. With regard to its libraries, a word may be said. Its system consists of the Mitchell Library, which is the

## ITS MUNICIPAL ENTERPRISE & ITS PROSPERITY.



JOHN JAMES.

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

is now the fashion to call—with appropriateness—the

chief, and is the largest free library in Scotland; Sir John's Library, now in process of re-organisation; sixteen district libraries, including two in the making; and the Rankin three libraries contain over

100,000 volumes.

The same spirit of the City Fathers is emphasised, too, in their recognition of the necessity for those open spaces

ONE OF NUMEROUS INSTITUTIONS MAINTAINING THE HEALTH OF THE PEOPLE: THE WESTERN INFIRMARY, GLASGOW.

alarm the disappearance of open space and green field, under the invading march of the miller. It was not until 1854 that the civic conscience was awakened. . . . The purchase of the lands of Kelvin-

grove for the purpose of forming a public park marks an era in the history of the city. Glasgow cannot grumble on this score now, and its open space with its architecture, its air of greenness, its obvious interest in the arts, and its splendid harbour and docks, in attracting and holding the attention not only of the native, but of the visitor from all parts of Great Britain and abroad. Of a certainty, it is very well served by its sons.

Mention must be made too of the School of Navigation at the Royal Technical College—for Glasgow is above all a great Port. The value of this cannot be over-emphasised; and the course of study for youths desirous of becoming officers in the Mercantile Marine is as thorough as it is practical. Included in the subjects are: navigation, celestial astronomy, seamanship, signalling, ocean meteorology, compass deviation, naval architecture, descriptive engineering, and shipping law. The laboratories are well supplied with models and appliances for demonstrating the mechanics of seamanship, while a complete set of meteorological instruments is augmented by the weather forecasts, which are received daily from the London Meteorological Office. The equipment includes signalling apparatus and a Marconi wireless installation. The astronomical observatory is equipped with the "Dankers" equatorial telescopes—a 13-in. Newtonian reflector, a 6-in. refractor, and a 24-in. transit instrument.

For the rest, it must be noted that Glasgow must give much credit to the individual. To quote a review from a Handbook issued in 1894 by the Corporation: "What Glasgow—what the world owes to the discoverers and inventions of James Watt, of Joseph Black, and of Lord Kelvin, it is impossible to estimate; and after those come a host of men who in a more limited manner contributed to the prosperity of Glasgow

and to the benefit of mankind. Among the most prominent have occurred at once the names of David Dale, brewer, hawker, manufacturer, turnkey, dyer, banker, and evangelist (afterwards also of Robert Owen); in chemical industries there were Charles McIntosh, Charles Tennant, and Walter Crum; in the iron trade, Messrs. Beameson, Neilson, John Wilson, and the Laird family; in shipbuilding and engineering, Robert Napier, John Elder, and James

A PROMINENT MEMBER OF THE CORPORATION OF GLASGOW: THOMAS BURN.

THOMAS BURN.



PLEASANTLY SITUATED ON BOTH BANKS OF THE KELVIN, AND RUN BY THE CORPORATION SINCE 1891: THE BOTANIC GARDENS, GLASGOW.



ON THE SITE OF A CHURCH ERECTED IN THE SIXTH CENTURY BY ST. MUNIO, THE FINE PRE-REFORMATION GOTHIC CATHEDRAL.

Bald; in navigation, Henry Bell, David Napier, and George Burns. To whom should be added a succession of City Fathers whose records will stand large over Glasgow, in its beauty, its health, its arts, its crafts, and its prosperity.



FOUNDED IN ACCORDANCE WITH A BULL OF AUTHORISATION ISSUED BY POPE NICHOLAS V. IN 1450: GLASGOW UNIVERSITY.



HOME OF A COLLECTION BEGUN IN 1805, IN THE OLD MANSON HOUSE OF KELVINGROVE: THE KELVINGROVE ART GALLERY AND MUSEUM.

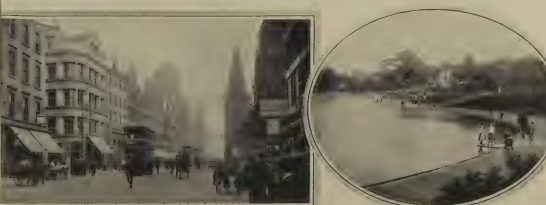
continuation of inadequate schemes which had proved of little value in the two preceding centuries, and an Act of Parliament was obtained to "cleanse, sewer, straighten, enlarge, and improve" the channel from Dunlop Foot



THE TOWN CLERK OF GLASGOW: MR. JAMES LOWRIE, J.P.



SOURCE OF THE MUNICIPAL WATER SUPPLY: LOCH KATRINE, 14 MILES FROM GLASGOW BRIDGE—THE ISLANDS.



FORMERLY CONNECTED WITH THE EAST END OF THE TOLBOOTH: TRONADE, GLASGOW—A BUSY THOROUGHFARE.



FATHER OF THE GLASGOW TOWN COUNCIL: 18-18, QUEEN'S PARK ROAD.

IN ONE OF THE FINEST OF GLASGOW'S MANY EXCELLENT "LUNGS": QUEEN'S PARK, GLASGOW.



## A RECORD OF CONTINUAL GROWTH: THE PROGRESS OF THE CLAN LINE.



Photo, Jacollette.

FOUNDER AND CHAIRMAN OF THE CLAN  
LINE: SIR CHARLES CAYZER, BT.

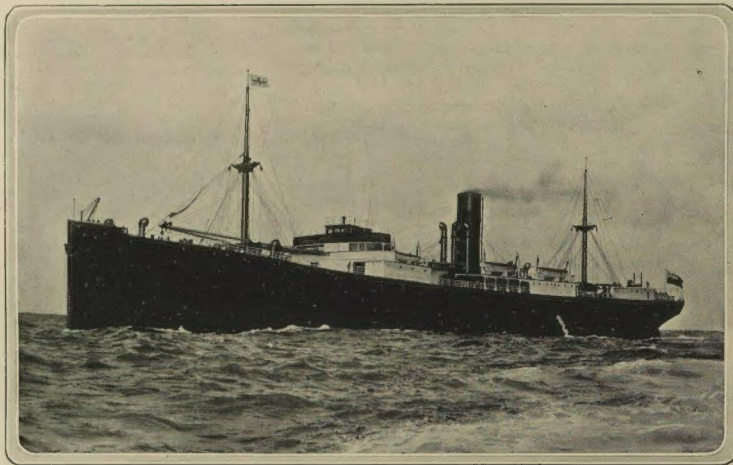
African ports was inaugurated; a year later came the first sailings of a new service from Glasgow

and Liverpool to Colombo, Madras, and Calcutta. Subsequent years saw a great extension of the Line's operations, and regular services are maintained from Glasgow and Liverpool to Bombay, Malabar Coast ports, Colombo, Madras and Calcutta, Chittagong, South Africa, and to East Africa, via the Suez Canal, whilst from New York a regular service to South Africa is also kept up.

The Clyde has received orders for two additional steamers, which are to be ready in 1913, and will bring the gross tonnage to about 260,000. The vessels added in 1911 and this year were built

for the Australian trade, and are exceptionally fine, being about 450 feet in length, of the shelter-deck type, and having clear holds for the carriage of bulk cargo. Further, several of them are fitted for the conveyance of refrigerated cargoes. Two of them, the *Clan Macnaughton* and *Clan Macphee*, have recently shown their power by completing the voyage from Fremantle to Calais in thirty-one and thirty-two days, respectively, thus setting up records for cargo-boats from Australia; while the *Clan Macrae* discharged in London the other day, in exceptionally fine condition, the first cargo of Tasmanian apples.

The head office of the Company is at Glasgow. Sir Charles Cayzer, the founder, is Chairman both of the Clan Line Steamers, Ltd., and of the Manager's firm, Cayzer, Irvine, and Co., Ltd., who have branches in London, Liverpool, and Manchester. Further, he is a Justice of the Peace, and Honorary Colonel of the 3rd Lowland Brigade, Royal Field Artillery. From 1892 to 1906 he sat as Member of Parliament for Barrow-in-Furness, the first Conservative who had ever represented that constituency.



Photo, Frank and Sons.

CREATOR OF A RECORD BETWEEN FREMANTLE AND CALAIS: THE "CLAN MACPHEE."

The "Clan Macnaughton" and "Clan Macphee" recently set up a record for cargo-boats from Australia by completing the voyage from Fremantle to Calais in thirty-one and thirty-two days respectively.

THE story of the Clan Line of steamers is a record of rapid and richly deserved progress. Established in 1878 by that well-known expert in shipping matters who is now Sir Charles Cayzer, Bt., of Gartmore, Co. Perth, it was at first an affair of half-a-dozen vessels, designed to trade between this country and Bombay. In the year of its foundation, in fact, it was represented by but two steamers afloat, and it was only in 1879 that the six were in service. That was a sufficiently humble beginning; but it opened the way to much business. In 1880 the Line still had the six ships, with a gross tonnage of 12,507. In 1881, it had eleven with a gross tonnage of 23,730; in 1882, twenty-two, gross tonnage 53,564; from 1883 until 1887, twenty-five, gross tonnage 70,483; from 1888 until 1890, twenty-four, gross tonnage 68,058; in 1891, twenty-seven, gross tonnage 73,606; in 1892 and 1893, twenty-eight, gross tonnage 75,874; in 1894, thirty-one, gross tonnage 83,636; in 1895, thirty-two, gross tonnage 86,242; in 1896, thirty-seven, gross tonnage, 99,642; in 1897, thirty-five, gross tonnage 106,397; in 1898, thirty-five, gross tonnage 110,517; in 1899, thirty-nine, gross tonnage 132,519; in 1900, forty-four, gross tonnage 152,824; in 1901, forty-five, gross tonnage 157,349; in 1902, forty-four, gross tonnage 162,533; in 1903, forty-eight, gross tonnage 185,031; in 1904, fifty-one, gross tonnage 202,782; in 1905, forty-six, gross tonnage 187,930; in 1906, forty-five, gross tonnage 183,805; in 1907, forty-eight, gross tonnage 198,803; in 1908, fifty, gross tonnage 206,212; in 1909 and 1910, forty-nine, gross tonnage 202,622; in 1911, fifty-six, gross tonnage 237,552; and at the present moment, fifty-eight, gross tonnage 249,000.

It was in 1881 that the service from Glasgow and Liverpool to South

## A FIRM FAMED IN GLASGOW & ABROAD: GOW, HARRISON, & CO.



PARTNER IN MESSRS. GOW,  
HARRISON, AND CO.: MR. LEONARD  
GOW, J.P.

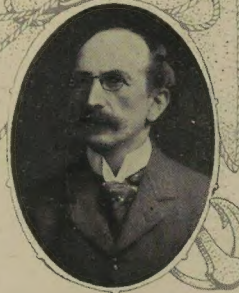
Photograph by Aunan.

business. Fifteen years afterwards, Mr. Allan C. Gow died, and was succeeded, as senior partner, by Mr. Leonard Gow senior, who, with Mr. James McGregor, started the Glen Line of steamers, trading between London, the Straits, and China. This was a year after the Suez Canal was opened; and for many a year to follow, when the China tea race was still one of the features of the shipping business, the firm's vessels had the honourable distinction of bringing in the first new season's teas from the Celestial Kingdom. With Allan C. Gow and Co., the present Mr. Leonard Gow and Mr. John R. Harrison worked for a good space; then the latter, who served his apprenticeship in a shipbroker's office at Newcastle-on-Tyne, joined the firm of P. H. Dixon and Harrison, ship-owners and brokers and insurance agents. Later, soon after the death of his partner, Mr. Harrison amalgamated his interests with those of Mr. Leonard Gow junior; and thus 1895 saw the two former colleagues sole partners in the company which

has won such high rank, acts as ship-owners, ship-brokers, coal-exporters, and insurance brokers, and manages a fleet of seventeen high-class cargo-steamers.

Mr. Harrison, it may be noted, is a Director of Lloyd's Register of Shipping, Bureau Veritas, ex-President of the Clyde Steamship Owners' Association, President of the Cumberland and Westmoreland Association of Glasgow, and a Director of the *Empress* training-ship. It may be added, too, as a matter of more than common social interest, that three years ago he purchased the Scalescough

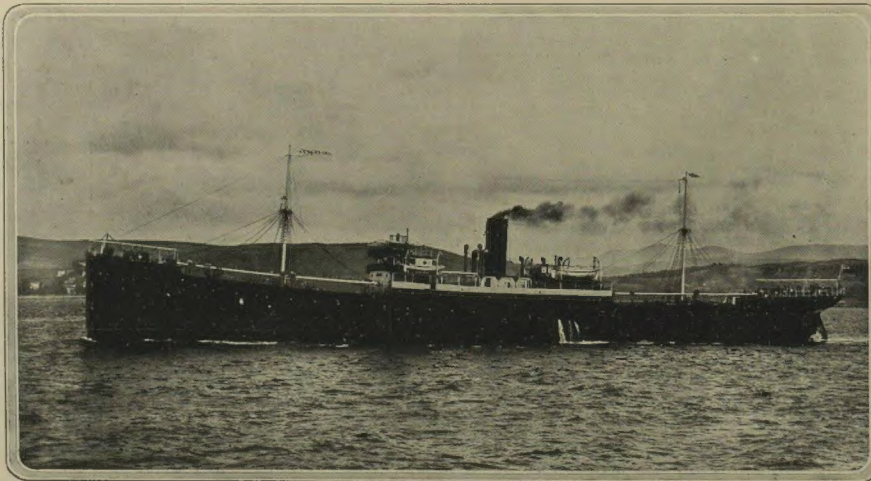
Mr. Leonard Gow comes, as has been indicated already, of a family long noted in the city of St. Mungo. His father, Mr. Leonard Gow, LL.D., J.P., was a prominent figure in the public and commercial life of Glasgow for over half a century, and not



PARTNER IN MESSRS. GOW,  
HARRISON, AND CO.: MR. JOHN  
R. HARRISON.

Photograph by Lafayette.

only a successful shipowner, but a philanthropist who did much for his less fortunate fellow-citizens. His grandfather, James Carswell, built a very considerable part of the Royal Exchange district of the city, so the present Mr. Leonard Gow has unusual traditions behind him: that he has followed them worthily is very evident. His interests are many: he is a J.P., a director of the North of England Protecting and Indemnity Association, the Glasgow Shipowners' Association, the Glasgow Shipowners' and Shipbrokers' Benevolent Association, the Sailors' Home, the Canal Boatmen's Friend Society, the Glasgow Seamen's Friend Society, treasurer of the Glasgow Branch of the Royal National Lifeboat Institution, and a member of the general list of managers of the Glasgow Savings Bank. Mr. W. G. Forsyth and Mr. William McInnes, who for many years have been identified with the business, are junior partners of the firm. Such is the flourishing and ever-growing business of Gow, Harrison, and Co.



Photo, Robertson.

OF THE FLEET MANAGED BY GOW, HARRISON, AND CO.: ONE OF THE FIRM'S FINE STEAMERS.  
Messrs. Gow, Harrison, and Co. manage seventeen high-class steamers, and are ship-owners, ship-brokers, coal-exporters, and insurance brokers.

Estate, a property attractive as having been owned by members of his family for over two hundred years.

are junior partners of the firm. Such is the flourishing and ever-growing business of Gow, Harrison, and Co.



SCOTTISH MUSIC ABOARD A DONALDSON LINER:  
AN EMIGRANT PIPING ON DECK.

## A FAMOUS SHIPPING FIRM: THE DONALDSON LINE.

SETTING OUT FOR CANADA: PASSENGERS  
LEAVING PORT ABOARD A DONALDSON LINER.

IN 1855, the port of Glasgow saw the birth of the firm of Donaldson Brothers, owners of the Donaldson Line; and, like most other shipowners of that time, the original founders, Messrs. William F. Donaldson and John Donaldson, opened offices in what was then the shipping quarter of the town, Buchanan Street. William F. Donaldson is now represented, it is interesting to remark, by two of the present partners in the firm, his sons, Messrs. William B. Donaldson and N. P. Donaldson; and John Donaldson by his sons, Messrs. William C. Donaldson and Charles Donaldson.

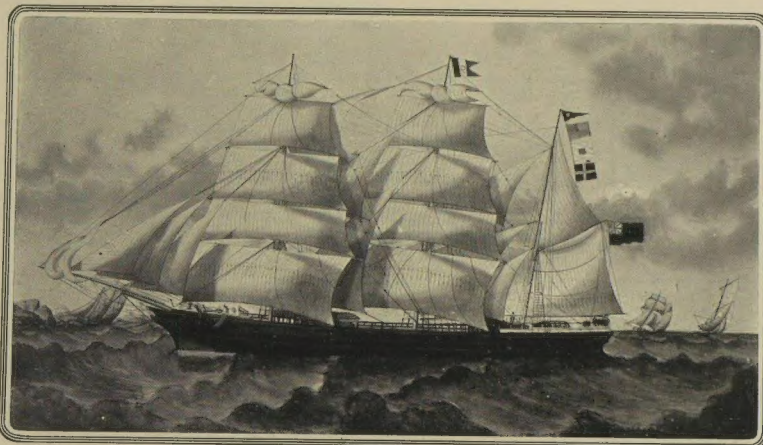
In 1858, with the little wooden barque *Joan Taylor*, of 299 tons, the Donaldson Line inaugurated its service between Glasgow, Liverpool, and South America. The next ten years witnessed additions to the fleet in the shape of the sailing-vessels *Mary Falconer*, *Margaret Falconer*, *Parana*, *Maranon*, and *Imuncina*.

Iron at this time was gradually displacing wood in ship-construction, and the building of the composite sailing-vessel *Colorado* was the Line's first venture in other than wholly wooden vessels. A still further advance in building construction was marked by the launch of their first iron vessel, the barque *Miami*, of 498 tons, in 1867. Further additions to the fleet

the advantages, geographical and otherwise, of St. John, New Brunswick, have so manifested themselves that this port has become the winter port of call, and a regular weekly sailing has for some years been in institution. In addition, in the summer months, a three-weekly service is also maintained to this port. About the year 1887, the Line made Baltimore in the State of Maryland the chief port of call in the United

and Engineering Co., Ltd., Greenock, the t.s.s. *Cassandra*, of 10,000 tons; in the early part of 1910 added the twin-screw steamer *Saturnia*, of 10,000 tons, built by Messrs. Charles Connell and Co., Ltd., Whiteinch; and in the present year, with the acquisition of the t.s.s. *Letitia*, of 10,000 tons, built by Messrs. Scott, they have a regular weekly passenger service to Canada all the year round.

The Donaldson Line, from the very commencement of their passenger service, recognised that the predominating demand was for second and third class accommodation. They have accordingly built all their steamers for these classes only. No first-class passengers being carried, second-class accommodation has been erected in the stadiest part of the steamers—viz., amidships, and, in consequence, promenade decks, etc., for second-cabin passengers are particularly extensive. Cabins are fitted up for two and four persons, and the appointments, fittings, and furnishing of these are on the most modern lines. No effort also is spared to make the ocean journey not only a necessity to some, but a pleasure to all. Large recreation-rooms, smoking-rooms, music-rooms, ladies' rooms, on all steamers, all play their part with this end in view. The Donaldson Line have taken a prominent

AS IT WAS IN THE DAYS OF THE SAILING-SHIP, THE DONALDSON LINER "MARANON"  
OF THE MIDDLE NINETEENTH CENTURY.

States, and, with the vessels of their own fleet, they have given a splendid service to that port, and also a few years later inaugurated a service to Newport, New Virginia, and have maintained both connections down to the present time.

Although the Donaldson Line had always made it their first aim in business to bring their steamers absolutely up to date for the carriage of live stock and all classes of freight, yet it is only within recent years that they turned their attention towards the passenger business. In 1904 it was felt that the time had come when the Line should take the place in the Canadian passenger trade which their long connection with Canada warranted; and with this end in view they built the new twin-screw passenger-steamer *Athenia*, of 10,000 tons, with accommodation for about 280 second-cabin and about 400 third-class passengers. An immediate success met their enterprise. The *Athenia* stepped into instant popularity, not only with the emigrant classes, but with the many representatives of British and Canadian firms whose business compels them to make frequent trips across the Atlantic. The *Athenia*

made her maiden trip in the passenger trade in March of the year 1905, and has maintained a regular passenger

part in greatly improving the lot of the Atlantic third-class passenger. The British emigrant above everything else desires privacy on board steamer; wishes, if at all possible, to be berthed with friends, or, if a married man, with his wife and family. All third-class accommodation on the Donaldson Line is in cabins, there being no open-berth steerage, and a special feature is that the *Cassandra*, *Saturnia*, and *Letitia*'s accommodation is mostly in two and four-berth rooms.

Each of their passenger-steamers has accommodation for about 300 second-class passengers, and, with the exception of the *Athenia*, all are fitted for about 1000 third-class passengers. The Line's passenger-steamers are all equipped with a complete installation of the Marconi system of wireless telegraphy (two operators being carried, so that steamers may always be in touch with other Lines, and with the land stations), are lit throughout by electric light, have boat accommodation for every soul on board, and are fitted with bilge keels to prevent rolling.

The Donaldson Line fleet consists of twelve vessels, of a total tonnage of about 200,000.

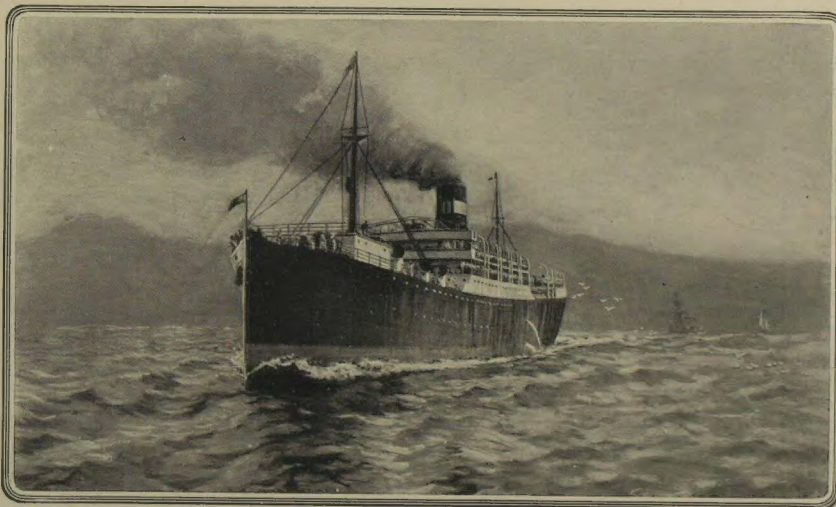
Bothwell Street is now the recognised shipping district in Glasgow, and in one of the finest buildings in that street are the Head Offices of the Line.

ON THE DONALDSON LINE'S NEW TWIN-SCREW STEAMER "LETITIA",  
THE SMOKING-ROOM.

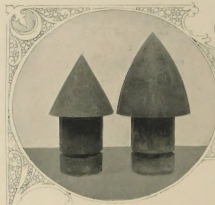
in the next few years were the *La Plata*, *Uruguay*, *Santona*, *Chilian*, and *Peruvian*. Hitherto Donaldson Brothers had contented themselves entirely with a fleet of sailing-vessels, but with the building of the s.s. *Astoria*, of 863 tons, in 1870, they took the first step towards what was to prove the relinquishing of the sailing-vessel for the steamer, this vessel being followed by the s.s. *Marina*, *Cybele*, *Colina*, *Eivene*, *Cynthia*, and *Titania*.

It would be superfluous to trace the growth of the Company down to the present time. Sufficient is it to state that in the year 1876 they made their first entrance into the port of Montreal, dispatching the s.s. *Colina* with a general cargo. This voyage had far-reaching effects. So favourably impressed were they with Canada and with the advantages of Montreal over other Canadian ports, that the voyage was repeated, and in the course of time ultimately led to the establishment of regular "Liner" sailings to Montreal in the summer months. Montreal became then, and has continued since to be, the chief port of call for the Donaldson Line in the summer time, a weekly sailing being maintained from the middle of April until the beginning of November. For their sailings in winter the Donaldson Line has tried a number of ports in Canada, but in the last few years

sailing to the present time. Her success encouraged the firm to progress in the passenger trade, and in the month of June 1906 they launched from Messrs. Scott's Ship-building

ONE OF A FLEET OF TWELVE VESSELS OF A TOTAL TONNAGE OF ABOUT 100,000.  
THE DONALDSON LINE'S "CASSANDRA."





OF STEEL, SIMILAR TO THAT USED FOR ARROW-  
POINING. PARTICULARS ROCK-CUTTER POSSES-  
SIONED ON THE LEFT AND NEW.

For each quality of rock there is a certain hardness and type of grain which is the most suitable. The points are made harder in the centre than on the outside, and they remain automatically sharp if the rock is of an adverse nature, such as limestone.

rock, particularly by drilling and blasting, but that process was slow and costly, especially in the case of the harder kinds of rock, which necessitated the use of diamond drills. Moreover, the explosives often

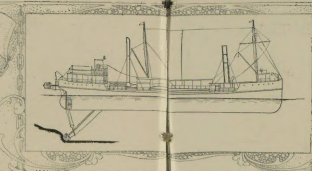
## HOW THE ENGINEER OVERCOMES HIS MOST STUBBORN OPPONENT:

THE most stubborn and intractable substance with which the engineer has to deal in the construction of harbour works or the dredging of canals and rivers is, naturally, rock. Until a few years ago, sub-aqueous work was done by drilling and blasting, but that process was slow and costly, especially in the case of the harder kinds of rock, which necessitated the use of diamond drills. Moreover, the explosives often

All these difficulties have been overcome by modern machinery of the type made by Messrs. Lobnitz and Co., Ltd., Shipbuilders and Engineers, at whose works at Renfrew, on the Clyde, are constructed the Lobnitz patent Sub-Aqueous Rock-Cutting Plant, and every kind of dredging apparatus. Messrs. Lobnitz, indeed, claim to be the largest firm in the world in their own particular line. Their works at Renfrew cover fifteen acres, and are equipped with the most modern machinery and the most powerful tools and appliances. The motive power throughout is electricity.

A Lobnitz Rock-Cutter, which is carried on a special barge or pontoon, consists of a heavy chisel of compressed steel, of which the weight is usually ten to fifteen tons. This chisel, called the "cutter," is fitted with a hard point, similar to that of an armour-piercing projectile, and is the tool by means of which the rock is broken. It is suspended vertically, as shown in our central illustration, and is dropped through the bottom of the pontoon on to the rock below the surface of which it is first cleaned from a height of six to ten feet. By its own weight, the cutter partly pulverises the rock and partly breaks it. The whole force of the impact is concentrated on a very small surface, and this has been found to crush or disintegrate the hardest rock. The cutter drives down to the same spot until it has penetrated about three feet into the rock. After the desired penetration at one point is attained, the barge is moved forward three or more feet, and the process of dropping the cutter is repeated. From ten to twenty blows are usually required at each spot to penetrate the rock to a depth of three feet. If the thickness of rock to be broken is greater, it is usually done in layers of three feet at a time, the first layer of broken rock being dredged away before breaking the second layer. One great advantage of the Lobnitz rock-cutter is its simplicity. Only four men are required on a barge with one rock-cutter, and six on a barge with two. Skilled labour is not required, the apparatus being easily worked by an ordinary crew after a little experience. The amount of coal consumed by one ten-ton rock-cutter in a day of ten working hours is one ton.

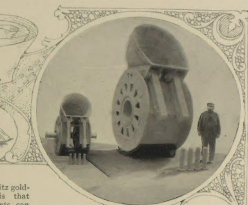
After the rock is broken by means of the "cutter," the fragments are removed by bucket-ladder dredgers, which Messrs. Lobnitz also build in great variety. By the rock-cutter system the removal of the broken rock is as easy as ordinary land-dredging, for the "cutter" leaves the debris broken small and on an even surface. Some of the huge buckets used on the largest type of dredger have a capacity of fifty-four cubic feet each. Among the various kinds of dredgers built by the company are bucket dredgers, suction hopper dredgers, some with a special rotary cutter for removing day, long-shoot dredgers, for conveying the



HOW A DREDGER WORKS. A SECTION HOPPER DREDGER, CALLED A "ROCK-LOAN," A SECTION HOPPER DREDGER FOR DREDGING CLAY, ETC. THE RESULT IS THAT WITH A "ROCK-LOAN" DREDGER, ALSO CAPABLE OF WORKING IN OTHER WAYS, IT CAN

material to a distance; and gold and tin dredgers. The buckets on gold-dredgers are, of course, much smaller than those used for dredging broken rock, as shown in one of our illustrations. One of the most interesting of the new types of dredger is that recently supplied by

## A MARVELLOUS SYSTEM OF ROCK-BREAKING & ROCK-DREDGING.



A STRIKING CONTRAST: A FIVE-CUBIC-FOOT GOLD-DREDGER BUCKET AND A FIFTY-FOUR CUBIC-FOOT SUB-AQUEOUS ROCK-CUTTER BUCKET.

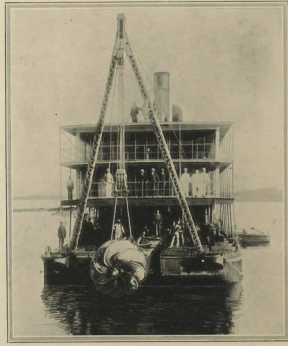
The illustration gives a striking idea of the size of the rock-cutter bucket in use. It breaks up the rock into pieces of a size easily dredged. For gold-dredging the buckets are much smaller.

they have built more than a hundred vessels, one of which—the largest bucket-dredger afloat—is shown in one of our illustrations. It is a motor vessel below the institution of Civil Engineers, and is the only one of dredging rock in the Canal. The consulting engineer, Mr. J. H. Colquhoun, said, "An apparatus was finally selected, of the type designed by Messrs. Lobnitz and Company, provided with buckets each weighing thirteen tons. . . . This apparatus, which commenced operations in 1902, has given very satisfactory results." Another interesting paper by the engineer in charge of the rock-removal operations at Blyth, Mr. John Watt Stuenkelman, compared the results obtained with a Lobnitz rock-cutter with those previously obtained by drilling and blasting. He found that by the Lobnitz system there was a saving in cost of over 25,000 per cubic yard of rock removed, which on the 20,000 cubic yards under treatment would amount to over £50,000. The Chief Engineer of the Manchester Ship Canal, Mr. W. H. Hunter, in a discussion on Mr. Stuenkelman's work at Blyth, described the use of Lobnitz rock-cutters on the Canal, where deepening operations involved the cutting in a depth of two feet for fourteen miles, of Triassic and Permian sandstone of varying hardness, including some very hard siliceous marls. The work of not including breaking, dredging, bargeing and tipping and towage, had been only a little over 100,000 per cubic yard. In addition to supplying machinery to these great works, Messrs. Lobnitz have sent out rock-breaking plants to many parts of the world, including, among others, Manzanillo, Bayamo, and Iloilo in France; Bari in Italy; Bilbao in Spain; Constantinople, the Tyne Canal in Canada, the Isthmian Canal, Buffalo and the Hudson Canal in the United States; many harbours in Argentina, Brazil, Japan, the Congo, and South Africa.

For gold-dredging Messrs. Lobnitz have introduced a special type of machine fitted with a patent propulsion screen for which they have sole rights. This device renders unnecessary the costly revolving screen and elevator of the old type of gold-dredger, breaks the gravel more effectively, and discharges it as high as may be desired behind the dredger. Gold-dredgers are erected complete in the works at Renfrew, and run under steam before being taken to pieces for transport. With one experienced mechanic they can be easily worked. They are built in various sizes. The average size to run night and day with a total crew of six men, and to work for a time, lifts and treats as much gravel each day as a thousand men could do with the old-fashioned washing arrangement. Besides the large amount of material from the economical outlay in doing so, the great advantage

of a Lobnitz gold-dredger is that the largest bucket-dredger afloat is shown in one of our illustrations. It is a motor vessel below the institution of Civil Engineers, and is the only one of dredging rock in the Canal. The consulting engineer, Mr. J. H. Colquhoun, said, "An apparatus was finally selected, of the type designed by Messrs. Lobnitz and Company, provided with buckets each weighing thirteen tons. . . . This apparatus, which commenced operations in 1902, has given very satisfactory results." Another interesting paper by the engineer in charge of the rock-removal operations at Blyth, Mr. John Watt Stuenkelman, compared the results obtained with a Lobnitz rock-cutter with those previously obtained by drilling and blasting. He found that by the Lobnitz system there was a saving in cost of over 25,000 per cubic yard of rock removed, which on the 20,000 cubic yards under treatment would amount to over £50,000. The Chief Engineer of the Manchester Ship Canal, Mr. W. H. Hunter, in a discussion on Mr. Stuenkelman's work at Blyth, described the use of Lobnitz rock-cutters on the Canal, where deepening operations involved the cutting in a depth of two feet for fourteen miles, of Triassic and Permian sandstone of varying hardness, including some very hard siliceous marls. The work of not including breaking, dredging, bargeing and tipping and towage, had been only a little over 100,000 per cubic yard. In addition to supplying machinery to these great works, Messrs. Lobnitz have sent out rock-breaking plants to many parts of the world, including, among others, Manzanillo, Bayamo, and Iloilo in France; Bari in Italy; Bilbao in Spain; Constantinople, the Tyne Canal in Canada, the Isthmian Canal, Buffalo and the Hudson Canal in the United States; many harbours in Argentina, Brazil, Japan, the Congo, and South Africa.

of a Lobnitz gold-dredger is that the largest bucket-dredger afloat is shown in one of our illustrations. It is a motor vessel below the institution of Civil Engineers, and is the only one of dredging rock in the Canal. The consulting engineer, Mr. J. H. Colquhoun, said, "An apparatus was finally selected, of the type designed by Messrs. Lobnitz and Company, provided with buckets each weighing thirteen tons. . . . This apparatus, which commenced operations in 1902, has given very satisfactory results." Another interesting paper by the engineer in charge of the rock-removal operations at Blyth, Mr. John Watt Stuenkelman, compared the results obtained with a Lobnitz rock-cutter with those previously obtained by drilling and blasting. He found that by the Lobnitz system there was a saving in cost of over 25,000 per cubic yard of rock removed, which on the 20,000 cubic yards under treatment would amount to over £50,000. The Chief Engineer of the Manchester Ship Canal, Mr. W. H. Hunter, in a discussion on Mr. Stuenkelman's work at Blyth, described the use of Lobnitz rock-cutters on the Canal, where deepening operations involved the cutting in a depth of two feet for fourteen miles, of Triassic and Permian sandstone of varying hardness, including some very hard siliceous marls. The work of not including breaking, dredging, bargeing and tipping and towage, had been only a little over 100,000 per cubic yard. In addition to supplying machinery to these great works, Messrs. Lobnitz have sent out rock-breaking plants to many parts of the world, including, among others, Manzanillo, Bayamo, and Iloilo in France; Bari in Italy; Bilbao in Spain; Constantinople, the Tyne Canal in Canada, the Isthmian Canal, Buffalo and the Hudson Canal in the United States; many harbours in Argentina, Brazil, Japan, the Congo, and South Africa.



SHOWING THE ROTARY CUTTER: A CLAY-CUTTING HYDRAULIC DREDGER SUPPLIED BY MESSRS. LOBNITZ TO THE EGYPTIAN GOVERNMENT FOR USE ON THE IYTH WHITE MILE.

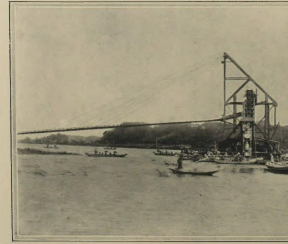
The rotary cutter is of the Robinson improved type, of cast steel, with renewable cutting edges. This type of rotary cutter separates the solid ingredients of boulders and heavy the soils. The strength and design of the cutter is fully equal to that of the best of the latter type of dredger.

Now the rock into pieces too large to be readily removed by dredging, and it was a matter of great difficulty to dispose of them. Again, the process of blasting was very inconvenient to any adjacent shipping.

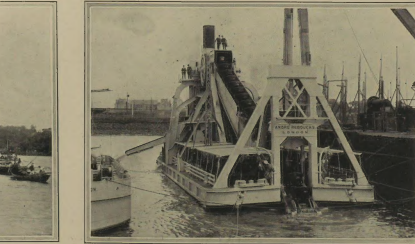
BEARING ROCKS UNDER WATER WITHOUT THE USE OF EXPLOSIVES: A LARGE FITTED ROCKET-SHOCK-CUTTER.

The actual rock-cutter is the heavy vessel of the rock and breaks it up.

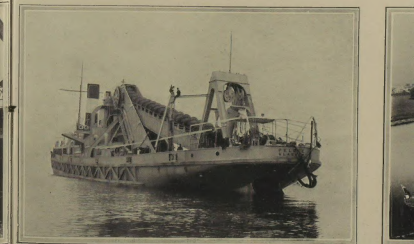
Messrs. Lobnitz to the Egyptian Government for use on the White Nile, and fitted with a powerful rotary clay-cutter, designed by Mr. A. W. Robinson of Montreal. The blades of this cutter are made in special form, to cut heavy clay with as little resistance as possible, and



BUILT BY MESSRS. LOBNITZ FOR THE YOKO HARA, JAPAN: A LONGSHOOT BUCKET-DREDGER.



BUILT READY FOR TRIALS IN FOUR MONTHS: A NON-PROPELLING BUCKET-DREDGER FOR THE PAKA PORT WORKS.



THE LARGEST BUCKET-DREDGER AFOAT: BUILT BY MESSRS. LOBNITZ FOR THE SUEZ CANAL COMPANY.

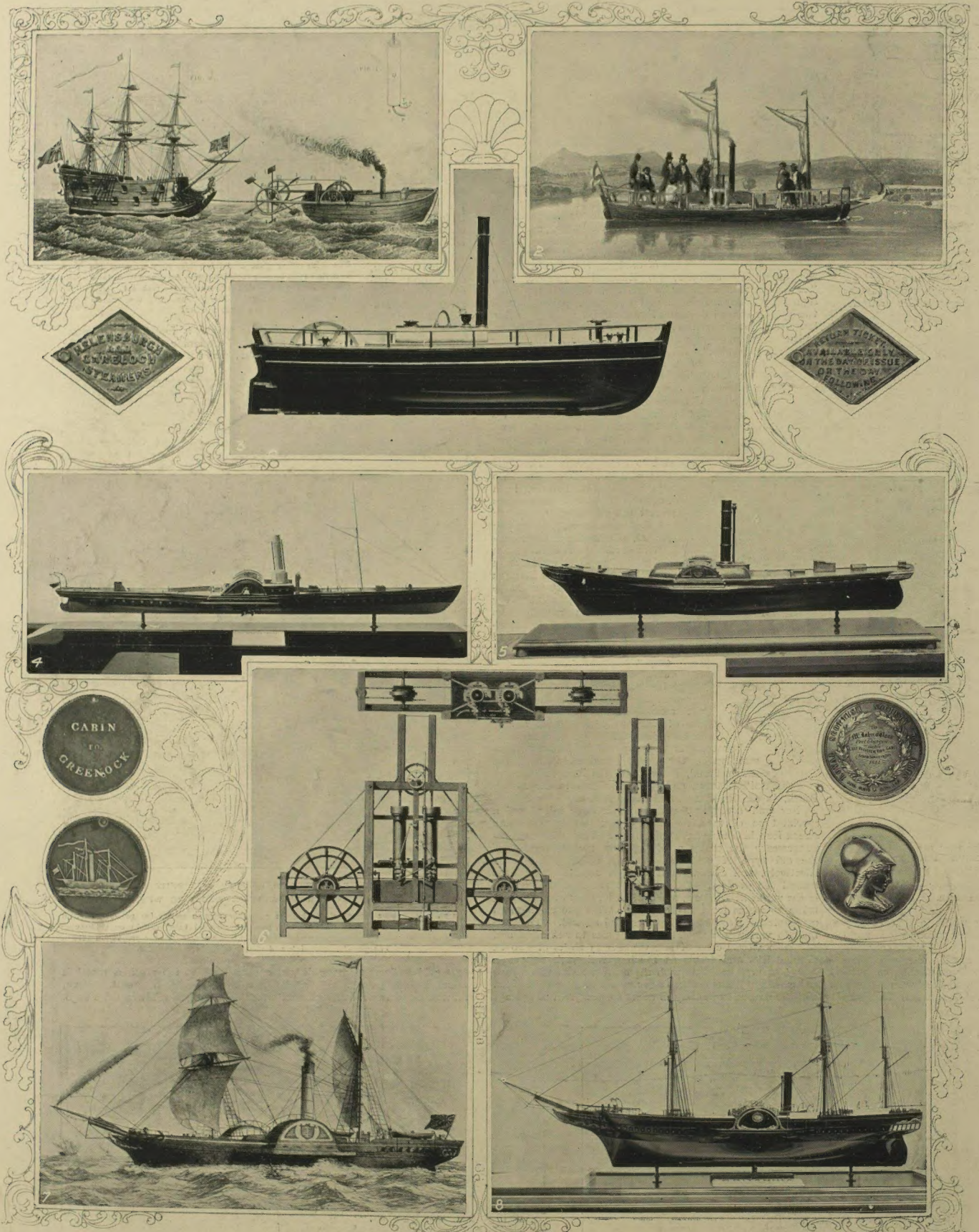


WHERE THE LOBNITZ ROCK-CUTTERS AND DREDGERS ARE BUILT: THE COMPANY'S WORKS AT RENFREW, ON THE CLYDE.



# THE STEAM NAVIGATION CENTENARY AT GLASGOW: EARLY VESSELS.

PHOTOGRAPHS SPECIALLY TAKEN FOR "THE ILLUSTRATED LONDON NEWS."



1. PATENTED IN 1736 AS A STEAM-TUG: JONATHAN HULLS' STERN-WHEEL STEAMER.
2. UNDER STEAM ON DALSWINTON LOCH IN 1788: PATRICK MILLER'S BOAT.
3. BUILT BY ALEXANDER HART IN 1801, AND ENGINED BY WILLIAM SYMINGTON: THE STERN-WHEEL STEAMER "CHARLOTTE DUNDAS"—A MODEL.
4. THE FIRST STEAMER BUILT OF STEEL: THE PADDLE-STEAMER "WINDSOR CASTLE," CONSTRUCTED IN 1830—A HALF-MODEL.

We illustrate above a number of the exhibits in the British Steam Navigation Centenary Exhibition in the Kelvingrove Museum, Glasgow. In the border are (at the top) the two sides of a lead return ticket for the Helensburgh and Gareloch steamers; (below on the left) the two sides of a brass token, "Cabin to Greenock"; and (below on the right) the two sides of the silver medal "presented to John Wood by the Royal Society in Edinburgh," in 1844, for his invention of a self-registering tide-gauge. With regard to other illustrations we may give the following notes: Hulls is said to have tried his scheme experimentally on the Avon in 1737, but abandoned it later. The "Charlotte Dundas" was 56 ft. long and was tried

5. BUILT IN 1830: THE PADDLE-STEAM YACHT "MENAI"—A MODEL.
6. WILLIAM SYMINGTON'S MARINE STEAM-ENGINE, MADE IN 1788: DETAILS.
7. THE FIRST BRITISH VESSEL TO CROSS THE ATLANTIC CONTINUOUSLY UNDER STEAM: THE PADDLE-STEAMER "SIRIUS" (BUILT IN 1837).
8. THE FIRST CUNARD LINER (BUILT IN 1837): A MODEL OF THE PADDLE-STEAMER "BRITANNIA" (1154 TONS), WHOSE MAIDEN VOYAGE, TO BOSTON, WAS MADE IN 1840.

on the Forth and Clyde Canal, when it towed two vessels of seventy tons burden to Port Dundas at a speed of over three miles an hour against a head wind. The experiment was given up from fear of injury to the canal banks. The "Windsor Castle" plied between Glasgow and Rothesay, and was 190 ft. long by 20 ft. beam, and had a depth of 7 ft. 6 in. The "Menai" had engines of a nominal 110 horse-power and a tonnage of 230. Symington's engine was an atmospheric engine with separate condenser, and so was covered by Watt's patent; possibly this is why it was so soon abandoned. The "Sirius" (703 tons) crossed the Atlantic in April 1838. The passage from Queenstown to Sandy Hook took eighteen days.